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CHILDRENS CONCEPTUAL UNDERSTANDING OF DEATH AS A FUNCTION OF AGE, EXPERIENCE, AND COGNITIVE DEVELOPMENT

by

© Katherine May Hildebrand

A THESIS

SUBMITTED TO THE GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

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ABSTRACT

Empirical research investigating the development of children's thinking about death has occurred infrequently. The present study sought to contribute further knowledge of this process by examining the influence of the child's age, experience/inexperience with death, and the child's level of cognitive development in relation to the child's concept of death. In addition, specific research questions were posed to suggest areas of inquiry for future study.

The sample consisted of 88 children, aged 5 to 10, who resided in a semirural, Mennonite community in southern Manitoba. Equal numbers of males and females were represented. Since ethical considerations for research with children necessitates parental consent, children participated on a voluntary basis. Using a set of prepared questions, each child was individually interviewed on his/her understanding of eight different components of death (Kane, 1975) and on the nature of his/her experiences with death. This was followed by the administration of three Piagetian conservation tasks to obtain an index of the child's current level of cognitive functioning.

Children's responses to questions examining each of the components of death were scored to obtain a cumulative measure of the child's concept of death. Replies to the queries on the child's experiences with death permitted categorization of children as experienced or inexperienced with death and also provided data for the research

questions.

Results were analyzed to examine the nature of the relationship between the variables under investigation and the child's concept of death using 2 two-way anovas: (1)Age X Experience (2)Cognitive Development X Experience. Age was found to be significant only for the youngest age group (5-7 to 7-0). Preoperational children's concept of death differed notably from the concept of death of children at the concrete operational level. The concepts of death of children at the other levels of concrete operations did not vary substantially from one another. The child's prior experience with death was observed to have a significant effect only for those children at the preoperational level of development. Data for the research questions were analyzed descriptively. Results were discussed with reference to Piaget's theoretical formulations and previous research.

On the basis of the observations made during this study, it appeared that death was a subject which could be discussed with children. Guidelines for discourse on this topic between adult and child were suggested. The study pointed to implications for death education and implications for future investigative efforts.

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CHAPTER I

Introduction

A simple child,
That lightly draws its breath,
And feels its life in every limb,
What should it know of death?

William Wordsworth
"We Are Seven"

Although written many decades ago, the message conveyed by Wordsworth's poem continues to reflect the thinking of adults when they are asked about children's cognizance of death. The prevalent belief that children have little, if any, understanding of death sets up invisible barriers towards openly discussing this topic with children. Moreover, it is difficult to associate children with death because the nature of these words are so contradictory; whereas children represent life and growth, death marks decay and the end of growth. Kavanaugh (1972) has written:

> To coin a title with the words "death" and "children" in it appears to me like the height of incongruity. Children are like definitions of life itself. They seem to bubble over and to foam with

> vitality. Life seems to be theirs, even the sickly and skinny ones, and death is the property of the old. (p. 125)

The belief that children have no knowledge of death, coupled with the difficulty in associating these two terms, has resulted in attitudes of protecting the child from any exposure to the occurrence of real death. While tremendous energy may be invested in sheltering the child, the effort is futile; death is everywhere. The death of a pet, an overheard conversation, an accident, discussions with other children, children's books, deaths portrayed in the news and programs of the media, all convey a meaning of death (Hagin & Corwin, 1974). In view of the available and overwhelming evidence, the adults' recalcitrance in openly discussing this topic with children is simply not valid.

Given that children have some awareness of death, it is essential that parents and professionals who work with them can answer their concerns and questions about death at a level commensurate with the child's understanding. To accomplish this goal, two types of information are required. First, it is necessary to know the nature of the child's present awareness. Second, it is necessary to be aware of the factors which may contribute to the child's knowledge of a concept. These considerations prompted the design of the present investigation.

To answer children's questions on death according to their level of understanding, one must have some notion of

the child's current level of awareness. The present study was designed to investigate children's understanding of death by individually interviewing each child on eight different aspects or components of the death concept which were previously delineated by Kane (1975). For example, some of these components included ideas that the dead are not capabable of movement; the dead are separate from the living; the dead cannot return to life; death can be the result of either internal or external events -- and so on.

Wass (1979) identified some influential factors which contribute to the child's death concept. She stated, "In order to answer children's questions concerning death, an adult must be aware of the child's age, experience, and prior understanding" (p. 211). Zeligs (1974) provided further evidence of the impact of age, experience, and cognitive ability on the child's developing concept. She wrote:

> We see that children's ideas about death grow with their age and development. As experience with death grows, from the death of flowers, insects, birds, to that of pets and people, the child's concepts widen. They not only vary with age, but also with the experiences, personality, and intelligence of the special child. (p. 26)

The importance of the child's age on his/her understanding of death is described by Koocher (cited in Bugen, 1979):

> It is apparent that children's ideas about death are quite different at different age levels. These differences assume dramatic proportions when the death of a relative, or even a pet, forces an adult into the awkward and uncomfortable position of explaining to a child what has happened. Yet, it seems imperative that we help the child to understand what has happened and share his feelings of loss in a way that will help him to adapt and grow appropriately. (p. 96)

Kastenbaum (cited in Grollman, 1967) advocated that professionals would be on safer ground if the child's age was used only as an approximate point of reference. He stressed the intellectual development of the child as a significant factor on the child's developing ideas of death. He stated:

> There is a close relationship between development of ideas about death and intellectual development in general. It is necessary to appreciate how strongly the child's concept of death is dependent upon the total pattern of mental processes and resources available to him at a particular stage in his development. (p. 92-93)

Bolduc (1972), on the other hand, emphasized the role of experience on the child's ideas on death. She compared concept development between children inexperienced with death and children who had experienced the death of a parent

or sibling. She concluded:

> The data obtained...point to the role of experience of death in the development of a higher level of concept of death. According to the children's reports, certain events seem to be important in their grasp of the meaning of death. Experiences of death, especially of the death of family members or close friends, center the child's attention on the event and lead to his questioning and consequent learning about the meaning of death. (p. 74-75)

On the basis of the available literature, the factors of age, cognitive development, and experience have been identified as influential factors on the child's thinking about death. Thus, in the present study, it was hypothesized that the child's age, the child's level of cognitive development, and the child's experience with death would be related to the child's concept of death.

The present study was conducted with a group of 88 children who ranged in age from 5 to 10 and who resided in a semirural, Mennonite community in southern Manitoba. Through the use of a semistructured interview schedule, each child was individually interviewed on his/her understanding and experiences of death. Three Piagetian conservation tasks were administered to obtain an index of each child's level of cognitive development. Results were analyzed to determine the influence of these three factors on the child's concept of death.

The purpose of the present study was to test the hypotheses that the age of the child, the child's level of cognitive development, and the child's prior experiences with death would be significantly related to the child's thinking about death. In addition, a further purpose of the study was to suggest research questions and generate information which would be useful for those adults who are faced with providing answers to children's questions concerning death.

A. Delimitations

The religious beliefs, the view of death, and the funeral practices of the Mennonite people may exert considerable influence on their children's understanding of death. This necessarily restricts the application of the present findings to comparisons with only similar groups of children. While a heterogeneous sample was desired, other school districts were reluctant to allow their students' participation. Indeed, it may be that the Mennonite view of death contributed to this school board's decision to sanction the present research.

CHAPTER II

Review of the Literature

A survey of the literature pertaining to the child's developmental thoughts on death revealed that while the topic has received some attention, its coverage has not been extensive. The present review, which commenced with a rationale for studying this topic, traced the research from its earliest works to more recent publications. Although a number of variables which contribute to the child's understanding of death have been investigated previously, the major focus for discussion in this review concerned the influence of the factors of age, cognitive development, and experience.

A. Importance of the Problem

Despite the recent promulgation of written material on the subject of death and dying, discourse on the subject of death in western society continues to be taboo. It has been suggested (Becker, 1973; Feifel, 1959; Kubler-Ross, 1969) that the modern individual exists in a death-denying society.

In her writings, Kubler-Ross (1975) claims that the difficulty in integrating the expectation of death into the understanding of life is related to its unfamiliarity; death is never seen anymore. When people die in hospitals, they are whisked away before anyone even knows that a death has occurred and before it can upset anyone.

This denial of death is apparent in a myriad of ways. When the dead are viewed by the living, cosmetics are applied so that the dead resemble the living. The pillowed and satined caskets offer further encouragement to deny death by presenting the illusion that the dead are only sleeping. Mourners are sedated so that they can no longer feel the pain of loss and so that they can function as though nothing significant has happened. Children are routinely sheltered from knowledge of death and are sent away without any explanation when a family member dies.

The usage of euphemisms to describe the occurrence of death is rampant. No one simply "dies." Rather, it is said that they "passed away," "departed," "passed on," "gave up the ghost," "kicked the bucket," "croaked," or "found everlasting peace." Hospital personnel say that someone "expired" or "succumbed." The words of "death," "died," or "dead" are unwelcome in the vernacular of present-day society.

The reluctance to speak about death, as well as confront death, is especially apparent in the type and lack of communication on this subject between adult and child (Feifel, 1977; Wass, 1979). Although a total lack of communication on this topic may not be present when circumstances force adults to tell children about a death, adults often rely on religious explanations or euphemisms to explain the death of a loved one. Children's understanding is impeded by descriptions such as "God took Daddy to be

with him"; "They're asleep forever"; or "They've gone away on a long journey." As Simpson (1979) has stated,"'Gone away' is quite as desolate as 'dead'" (p. 173) and conjures up even more questions in the child's mind as to why the child or other parent remained behind. In addition to the adult's inability to give realistic explanations, often adults are evasive and simply do not answer children's queries. Furthermore, those adults who recognize the importance of answering children's questions may be unaware of the child's level of understanding about death and may answer by using terms that are unfamiliar to the child.

The avoidance of this topic in discussions with children is well-intentioned (Wass, 1979). The parent, whose role is that of protector to children, seeks to protect the child from the harsh realities of life. Wass proposed several explanations for the adult's failure to face this question with children.

First is the belief that straightforward discussion of the facts of death takes away children's innocence and therefore their childhood. Also, there exists a fear that the children will become so frightened that they will never be able to enjoy life in a courageous manner. A further explanation suggests that as adults believe that death is an unknown, it is unrealistic to try to educate anyone, especially children, to prepare for it. Finally, the adults' reluctance to discuss the question of death with children is related to the adult's own need to deny and repress the

possibility and the inevitability of death.

A partial explanation for this overprotectiveness may be based on the absence in our culture of societal guidelines or rituals for dealing with children's confrontations with death (Birtchnell, 1973). This is in sharp contrast to the experiences of children at the turn of the century and the earlier decades of the twentieth century who were regularly exposed to the deaths of siblings, parents or other community members, who surveyed the dying process in the family's home, and who regularly attended family or community funerals. The futility of this protective stance becomes obvious when one examines the number of deaths to which the child is regularly exposed in the media. Fulton ("TV Deaths," 1984) has estimated that the average North American child watches 10,000 deaths a year on television, most of them being young people who died violently. Thus, not only can parents not prevent exposure to the occurrence of death, but when this exposure does occur, it represents a rather unrealistic or distorted view of death. The cartoon character Wiley Coyote can die on one show and then subsequently re-appear on a later show.

The adults' reluctance to discuss death and its concomitants with children has, at times, lead to some rather serious consequences. Kliman (1968), a New York psychiatrist working with traumatized children, points out that many children survive childhood bereavement markedly well but there are those who experience considerable

difficulty in adjusting to the changed circumstances following the death of a significant other. Kliman's clients ranged from a terminally-ill child, who had leukemia and with whom the diagnosis had not been discussed, to a child who had witnessed the brutal slaying of her brother. The protractive therapy required to help these and other children cope was described extensively and offers support for the belief that children need to feel free to communicate their feelings and thoughts in relation to death. When this is not possible, harmful effects may be potentiated.

In her experience as a clinical child psychologist, Zeligs (1974) interviewed many children who became emotionally disturbed following an experience with death. These children's difficulties were exacerbated by adult figures who endeavoured to protect the child by not explaining the meaning of death nor the real cause of the death. She emphasized that discussions about death can eliminate some of the guilt feelings engendered in children who believe that they were responsible for the death. Many authors on this subject have referred to the "magical thinking" present in childhood. The child believes that his wish for his mother to die in a moment of anger, subsequently "caused" her death in the automobile accident.

Retrospective research of adult mentally-ill patients found that a significant difference existed in the experience of childhood bereavement prior to the age of 9

for the ill group as compared to a matched control group (Birtchnell, 1973). The most marked difference in parental loss between these two groups occurred between the ages of 0 to 4 years. While Birtchnell cited research which had yielded similar findings, he pointed out other studies where these differences had not been present. More recently, on the basis of their work, Bendiksen and Fulton (1975) concluded that some forms of mental illness have their genesis in childhood bereavement. Gibson (1980) offered further support for this view when she pointed out that the inability of the child to work out a conceptual understanding of death and feelings in relation to death can have negative consequences for him/her even in adult life. She exemplified the importance of children acquiring a functional concept of death by recounting the life events of a young woman who was diagnosed as paranoid schizophrenic and who had never resolved her irrational fear of death.

Other adverse effects are apparent in some cases of juvenile delinquency in which the delinquent behaviour became a distorted substitute for normal grieving (Shoor and Speed, cited in Fulton, 1965). In the 14 cases studied, delinquent behaviour was absent prior to the death and the death precipitated the acting-out behaviour. These adolescents had possessed incomplete information about the death and had been unable to express their feelings (grieve) following the death of a significant other. Following therapeutic intervention, the delinquent behaviour ceased.

Studies investigating the dying child's awareness of death have frequently indicated the adverse effects of keeping the knowledge of the child's eventual death from the child. As Biner et al. (1969) have stated:

> It is a grave error to think that a child over four or five years of age who is dying of a terminal illness does not realize its seriousness and probable fatality. Repeatedly, experience has shown us otherwise. We have seen the pathetic consequence of the loneliness of a fatally ill child who has no one with whom he may talk over his serious concerns because his parents are frequently trying to shield him from the diagnosis... the dying child may have to deal alone with his fears, concerns and apprehensions and also cope with his own inner scheme of fantasies and "white lies" developed by his parents so that meaningful communication between the child and adults is prevented. (p. 324)

Vernick and Karon (1965), in their study of 51 leukemic individuals between the ages of 9 and 20, pointed out that, "Every child who is lying in bed gravely ill is worrying about dying and is eager to have someone help him talk about it" (p. 395).

Bluebond-Langner (1978), who studied terminally-ill children, observed that maintaining a context of "closed awareness" (where neither the child nor the parent openly acknowledged that the child would die) served to isolate the

child from his family at a time when the need for support was the greatest. During the final phases of the child's illness, the parents found it increasingly difficult to face the child for fear the child would realize and verbalize the prognosis or else they would fear either their child's or their own heightened emotionality. Consequently, she hypothesized that the child withdrew to protect himself/herself from the anticipated adult withdrawal.

Thus, existing research supports the belief that a lack of discussion on the topic of death can hinder the emotional well-being of children. This viewpoint is advocated by Feifel (1977) who considers that the inability to discuss this topic openly with children retards their emotional development. He stated:

> We do not protect children by shielding them from the realities of death. We only hinder their emotional growth. This ban usually mirrors more the adult's and parent's own anxieties and apprehensions about death than the child's actual ability to handle the impact of death. Children are more capable of withstanding the stress brought on by their limited understanding of death than its mystery and implied abandonment. (p. 6)

Summary

The literature presented in the preceding section not only highlighted some of the reasons why adults shelter

children from exposure to death but also pointed out some of the possible consequences of such overprotectiveness. While the reluctance to discuss death with children is well-intentioned and well-understood, the protective stance that adults currently hold needs to be challenged. Death, like birth, is a fact of existence and despite all efforts of protection, it can, and does, affect every individual at some point in his/her lifetime. The importance of a more open attitude toward discussing death with children becomes apparent when one considers, as Feifel postulated, that knowledge about death contributes positively to the emotional development of children.

B. Historical Background

Documented research originated with Scott's study (1896) which was based on a questionnaire designed to determine the nature of the 226 respondents' thoughts and feelings concerning old age, death, and a future life. The study was retrospective in design and thus relied primarily on the subjects' ability to recall their thoughts and the events surrounding death as a child. In spite of this shortcoming, this study laid the groundwork for further work. It was observed that the age for obtaining the first impression of death was generally at age 5 and that if it was delayed until much after this age, the impression of death was more likely to be unfavourable. In 84 cases, adults recalled ascribing life-like qualities to the dead;

the dead were breathing gently, could feel cramped in the coffin, could feel the dampness, or were only pretending. Although no age lines were provided, a child's mention of grief and sympathy usually occurred at a later age. Scott advocated funerals as a means of releasing the emotions which he considered as essential in order to relinquish the emotional links with the dead. He claimed that if these pathways with the dead remained active, they might become morbid and reactionary. On the basis of his subjects' responses, he concluded that the concept of death of self was preceded by the idea of the death of others.

In another study, Hall (1896) analyzed the responses of 1,701 individuals who had been asked to write essays to describe their fears. A fear of death was mentioned by 299 people although other fears which could eventuate in death such as drowning, disease, or fire were also reported. The fear of death increased during pubescent years but subsequently decreased after this period. Expressions of the fear of death were myriad and included such fears as touching the dead, being buried alive, cremation, the coffin, employees of an undertaker, and graveyards.

No major study occurred again until Schilder and Wechsler's study (1934) at the Bellevue Psychiatric Hospital in the city of New York. Projective techniques, records of children's spontaneous comments, and discussions with the 76 children who ranged in age from 5 through 15 were used to obtain information on children's thoughts on death. The

authors observed that for these children, death was not regarded as the natural end of life but rather death was a result of the hostility and the aggression of others. Death was the punishment for wrongful acts and thus could be avoided by good behaviour. Death was perceived as a deprivation; it was a state in which one could no longer participate in previously enjoyed events. Although these children did not fear death itself, they displayed a fear of being murdered.

Some of their observations have been replicated in later studies. These included the following: death was perceived as a reversible event to the very young; there was an inconsistency in solving problems related to the dead, that is, the dead couldn't feel but could still eat; and children stressed the immobility of the dead. Finally, these authors considered that children dealt with death and its appurtenances in a realistic and rather matter-of-fact manner. This observation also has been reported in some of the more recent literature.

Nagy (1948), frequently regarded as one of the pioneer investigators in this area, first published the results of her study in the Hungarian language in 1936 but a dozen years passed before her results were available in English. Primarily, she sought to ascertain the child's construction of a theory of death from a developmental perspective.

To test her hypothesis, she interviewed 378 children between the ages of 3 and 10 from different schools,

religious groups, and social levels. During interviews with the younger children, she asked them to define various words, one of which was the word "death." However, the older group was requested to write compositions on everything that came to mind about death, and their interviews were based on the ideas generated in their compositions and drawings. This variability in procedure has been the source of some of the criticisms directed towards Nagy's findings and conclusions.

Children's answers to the question of "What is death?" tended to fall into three categories, with responses specific to certain age groupings. From this, Nagy (1948) concluded that there existed a developmental progression of children's thoughts on death which was largely a function of age.

Children under the age of 5 considered death as reversible, that is, the dead did not remain dead but could come back to life. According to Nagy (1948), this was expressed in two forms which followed sequentially: (1) the child perceived death as sleep or departure and thereby denied its existence because emotionally the child could not accept it; (2) the child recognized the existence of death but could not distinguish its attributes from life and perceived it as only a temporary or gradual event.

The ages of 5 to 9 constituted the second stage. Here death was personified and was attributed to either the presence of a separate person (the Death man or the Grim Reaper) or else death was identified with the state of being

dead. Children believed that whether or not a person (child or adult) could escape death was contingent on their ability to escape these personalities. In this stage, children tended to accept the definitiveness of death, that is, everyone dies, but tried to escape its reality by suggesting that it was possible to escape from it. Therefore, it was not inevitable and universal.

The onset of the third stage after the age of 9 was characterized by a recognition that death was an internal process common to all living organisms, that is, a biological necessity and hence its universality was recognized. Death at this stage was also considered to be inevitable. In commenting on the stages she outlined, Nagy (1948) concluded that the child's theory at each stage reflected their general view of their world and this view changed as a function of age.

Anthony (1940), also one of the early researchers on children's understanding of death, completed her research in England just prior to the advent of World War II. This researcher utilized the Geneva Story Completion Test, a version of the Stanford-Binet Intelligence Test which included additional items related to death, and diaries kept by some of the parents who recorded their children's spontaneous questions or comments on death. The sample of 117 children who ranged in age from 3 to 13 came from London schools, some small country village schools, some from special schools, and some from child guidance clinics. Two

themes evident in the children's responses were of death described as a "sorrowful separation" and death defined as the "ultimate result of aggression." Thus, it was described as something that evokes both sorrow and fear. After categorizing the responses, Anthony designated five developmental stages of children's thoughts about death which began from ignorance on the subject (ages 3 to 4) and progressed to an interest in death but with erroneous or limited ideas present during the second stage. At the age of 7 or 8, children began to understand its biological and logical essentials but a clear understanding of death was not attained until the age of 12. Anthony concluded that a positive relationship existed between the age of the child and the level of conceptualization of death. However, there was higher correlation between the child's mental age and the child's concept of death. Anthony recognized that experience could influence a child's understanding of death; however, she considered that intelligence might be of even greater consequence.

Safier (1964) investigated the relationship between the development of the life concept and the development of the death concept in 30 male children between the ages of 4 to 11. The theoretical basis of the life concept was founded on the stages of animism formulated by Piaget and the death concept was based on the stages proposed by Nagy (1948). Following the presentation of 10 stimulus words and four questions designed to determine animism scores (attributing

lifelike qualities to inanimate objects)and death scores (attributing death to inanimate objects), each child was asked to explain his inaccurate responses.

Results confirmed the hypothesis of a decrease in animism and death scores with an increase in age. A correlation between life and death concepts existed for the three age groups, with the strongest relationship for the oldest group. On the basis of various categorizations made by two independent judges, a linkage between Piaget's and Nagy's (1948) theoretical bases was established. Children of the youngest age group (4 to 5) viewed everything as alive but in flux; so that even if death occurred, it was reversible and so the dead could return. Therefore, their animism was still somewhat unformulated. In the 7 to 8 age group, children are in a transitional phase whereby they are changing from a global to a more analytical approach to reality. They ask more questions to help them develop a definition of life. Death is attributable to an external agent. For the oldest group (10 to 11), their life and death concepts are integrated at a higher level and these concepts are viewed from a more adult and reality-based perspective. On the basis of her findings, Safier (1964) concluded that there exists a parallel development in the life and death concepts of children.

To investigate the existing conditions that contribute to a child's knowledge about death in his/her formative years and to examine how the affect pattern of death

develops, Portz (cited in Kane, 1975) interviewed 90 males from nursery, kindergarten, and third grade classrooms. Initially, the mothers were interviewed to ascertain their children's experience with death and other family events. Projective testing which emloyed adaptations of the Shneidman Make-A-Picture Story involved the themes of death, aggression, aggression-anxiety, separation-anxiety, and magical thinking. These were presented prior to and following an interview which questioned each child about the meaning of death.

Analysis of the results indicated that separation anxiety was the affect pattern most commonly present prior to the age of 7 while aggression-anxiety was the affect pattern evident after the age of 7. While no significant relationship existed between the high maternal anxiety about death and the types of explanations that the parents offered to the child, experience with violent types of death and parental attitudes of non-avoidance of explaining death were determined to be the most significant environmental influences. Portz (cited in Kane, 1975) concluded that children had a better capacity to react with appropriate feelings and control when they had more than minimal experience with death and when their parents had been more open in discussing the significance of death with them.

On the basis of her observations and discussions with English primary school children, as well as conversations with adults regarding their childhood attitudes, Mitchell

(1966) reported that children's attitudes revealed a great deal of anxiety about death.

Like other researchers before her, Mitchell (1966) recognized that children prior to the age of 5 view death as reversible. Moreover, the central theme of her work posed that children primarily view death as a deprivation, that is, the basis and most persistent fear of death is of separation from loved ones. Mitchell considered that children's attitudes were largely influenced by factors such as genetic patterns (indicated by the personality of the child); the ability level of the child (the "more gifted" children were credited with being those who disliked and feared death the most); and other environmental variables such as the child's position in the family, the economic level of the family, the parental understanding of death, rural versus urban living, religious influences, the child's specific cultural community, and scientific influences. While it is interesting to note that there is very little research into children's fear of death, it is noteworthy that likewise, very little research has been directed at empirically investigating the factors suggested by Mitchell.

Summary

The historical development of the child's thinking in relation to death has been traced from the first work performed by Scott and Hall (1896) to the relatively recent work of Mitchell (1966). The limitations of some of the

research methods employed in these early investigations point to the need for caution in applying previous findings to present-day children. For example, both Scott's study and Hall's study were retrospective in nature and thereby relied heavily on the adult's ability to recall childhood events. The children who participated in Schilder and Wechsler's work (1934) were selected from a psychiatric hospital, and thus, their responses might not be representative of the responses of healthy children. The personification of death reported by Nagy (1948) has not been replicated in later studies. It may be that the acculturation process for children has changed since these earlier studies and this change could contribute to the current variation in views of death from those found previously. Nevertheless, these earlier efforts laid the necessary groundwork for further investigative study.

C. Age

The influence of age on a child's concept of death was first examined by Nagy (1948) who found that there was a developmental sequence in the child's thinking about death that was largely a function of age. Likewise, Anthony (1940) offered an age-related model whereby the concept of death gradually changed with an increase in age. Whereas Anthony found that the two most evident themes in children's understanding of death were death as separation and death as the result of aggression, Portz (cited in Kane, 1975)

further contributed to current knowledge by finding that separation was the affect pattern most often present prior to age 7 and aggression-anxiety was the most common affect pattern after the age of 7.

Others have empirically investigated the significance of age as a contributing factor to children's understanding. The development of children's attitudes toward death was explored in a study by Gartley and Bernasconi (1967) who interviewed 60 Roman Catholic school children ranging in age from 5.5 to 14 years of age. Analysis and interpretation of the interviews were made by age groupings. In the youngest grouping (age 5:5 to 6:4) children realized some lack of functioning for the dead (breathing) but they were more uncertain as to other functions (feeling). Death was not perceived as a personal reality. For this age group, descriptions of death occurred in concrete, rather than in abstract terms. For the next age group (6:6 to 7:5), death was recognized as irrevocable but still not as personal, futuristic reality. This was followed by the next grouping (7:5 to 8:4) who acknowledged death as a personal reality which was an immediate possibility. Death was beginning to be discussed in abstract terms, although some contradictions existed. This was explained by the authors who suggested that these abstract terms were not yet well-formulated. The next grouping (8:5 to 9:8) possessed characteristics of the earlier groupings but provided more detailed descriptions. An element of reticence, not evident in the earlier groups,

was observed in the responses of the next grouping (9:6 to 10:11). Also, for this group, causes attributed to death appeared to be more violent. The oldest age group (10:11 to 14) attributed less violent causes to death, provided more mature answers than previous groups, and initiated questions to the researcher.

These authors concluded that the concept of death largely standardizes with age. As the entire sample believed in the irrevocability of death, a finding which was contrary to previous research, the authors concluded that the children's religious instruction, in addition to the children's television viewing habits, accounted for these apparent differences. Since a fear of death was not evident in children's replies, the authors posed the notion that children acquire a fear of death through observing adult behaviour.

Childers and Wimmer (1971) interviewed 75 children, ranging in age from 4 through 10, to test their hypothesis that children's cognitive awareness of death as irrevocable and universal is independent of age. A set of prepared questions were asked during an individual discussion with each child. The questions asked were: (1) Say whatever comes to your mind about death. (2) Have you seen anything or anyone dead? Tell me about it.(3a) What are some things living people can do? (3b) Which of these things can dead people do? (3c) Does this mean they can come back to life? (4) Does everybody die? (5) Will everybody die? The

interviews were taped and responses were recorded in written form. Following the discussion, children were asked to either write or draw about what death meant to them.

Using a Chi-square analysis, results refuted the original hypothesis that universality is independent of age; a moderate relationship existed between acceptance of the universality of death and increasing age. The age of 9 was established as the cognitive point when the notion of universality was understood. When results were analyzed for the condition of irrevocability, a systematic development of this concept did not emerge through the age of 10, and no cognitive point for understanding this idea was determined. Furthermore, although the questions included references to experiences with death, no clear-cut pattern between the concept of universality and the child's experiences was evident.

Melear (1973) interviewed 41 children ranging in age from 3 to 12 and attempted to have each child comment upon the various components of death. These included the understanding of death as temporary or final, as the loss of someone, as the cessation of biological functioning, as anxiety, as a person, as universal, as primarily caused by aggression, various degrees of death, and life after death. The children's taped responses were evaluated by a panel of three judges who delineated the responses into four categories of understanding about death. These were designated as: (1)relative ignorance of death; (2)death

perceived as a temporary state; (3)death viewed as final with some biological functions present; (4)death as final and irreversible with all biological functioning having ceased. The results demonstrated a gradual increase in children's understanding of the irrevocability of death and the cessation of bodily processes after death as a function of age, with greater understanding being acquired as the child's age increased.

Gesell, Ilg, Ames, and Bullis (1977) established guidelines for understanding the progressive development of the concept of death during childhood. Rather than using the interview method, they based their descriptions on a longitudinal study of approximately 50 children who ranged in age from 5 to 10, who were of average to superior intelligence, and who were from the middle to high socio-economic status. In addition to the observations of children in the clinic setting, parents and teachers supplied valuable observational data. Results of these findings are presented in the form of growth gradients which are considered to be approximate norms of development.

These investigators outlined the view of death characteristic of each level. The immobility of the dead was recognized by the 5-year-old. There may exist a vague recognition that there is a finality to death and that when you become old, eventually you die. Death is viewed as reversible because the child cannot consistently make a distinction between animate and inanimate objects when the

latter are capable of movement. For example, a child of this age might designate a ball as alive, since it can move. Thus, the dead too, may be considered to have life. Generally, a child of this age responds to death matter of factly and unemotionally; the child is unconcerned about the possibility of his/her own death or the death of others.

The 6-year-old was observed to be more emotional about death and more fearful that his/her mother would die even though the child did not believe in a personal death. Death was sometimes viewed as reversible. In addition to illness, causes were now attributed to death. Other characteristics included a preoccupation with the appurtenances of death such as funerals and graves.

The concept of death for the 7-year-old was more realistic than that of the 6-year-old but death was not yet accepted as a biological process. The child began to recognize death as a personal event, but according to Gesell et al., (1977) this was usually denied. Other features included a continued interest in visiting cemeteries, in funerals, burial sites, and noticeable interest in the causes of death. This age was designated as the time when the child was beginning to be included in funeral attendance.

The 8-year-old's view of death marked the beginning of an interest in what happens after death and was characterized by a decrease in interest in other features appertaining to death. The child accepted, unemotionally,

the reality of his/her own death. Usually, not much consideration was given to death unless it was of someone close to the child.

Likewise, the 9-year-old was not noticeably interested in the topic of death. Interest for this group focused on the physiological aspects of dying such as the cessation of breathing, the lack of body temperature, and the cessation of the heartbeat. Some members of this age group were concerned about the soul and its separation from the body after death. The majority of 10-year-olds appeared relatively unconcerned about death. Death was acknowledged as a biological process which occurred to everyone and which resulted when physiological processes ceased.

Swain (1979) interviewed 120 children between the age of 2 through 16 to examine their ideas of the finality of death, inevitability of death, and their awareness of death as a personal event. The effect of the variables of age, sex, level of parental education, and the degree of religious influence within the family on the child's concepts were investigated. None of the children who participated had experienced the death of an immediate family member. Children were interviewed individually using a semistructured format which allowed for the individual explanations of each child but which included specific questions related to the cause of death, the occurrence of death, whether everyone died, and what happened to people when they died. On the basis of a pre-established 5-point

rating scale for each of the three concepts, the interview responses were rated independently by two judges.

Results indicated that for the three concepts, age was the only variable which demonstrated a main effect on the child's concept. For the concept of finality, the children from ages 2 through 4 differed significantly from the other age levels. The majority of these children tended to view death as a reversible rather than as a final event. One explanation for her findings was that children of this age had not yet been involved in the educational system and consequently, they had not been exposed to the beliefs of other children. Therefore, it was more likely that children of this age would create their own ideas.

The 2 to 4-year-old age group differed from the other groups in their concept of the inevitability of death. About two-thirds of this group viewed death as avoidable, unlikely, or brought about by unusual events such as an accident or catastrophe. The children expressing this idea had also described death as reversible. For this concept, the 5 to 7-year-olds also differed significantly from the 14 to 16-year-olds. The primary difference was that the 5 to 7-year-old group regarded death as not quite inevitable, that is, likely, but being caused by somewhat unusual events. The older group, however, recognized that death could occur at any time and would occur to all, especially during old age or as the result of a serious illness.

Death perceived as a personal event was significantly different from the other age groups for both the 2 to 4 and the 5 to 7-year-old groups. For example, approximately one-fourth of the youngest group believed that they would die in the future whereas one half of the 5 to 7-year-group believed that they would die. The understanding that death could occur for any reason and at any time seemed to increase with age. Swain (1979) concluded that the greatest changes in children's understanding of death seemed to occur between the ages of 5 through 7 when they began school and also at the midteenage years when their ideas became more personally real as well as more abstract.

D. Cognitive Development

The effect of the child's level of cognitive development on the concept of death was recognized as important by one of the earlier researchers in this area. Anthony (1940) found a stronger correlation between the mental age and concept of death than between chronological age and understanding about death. Kastenbaum (cited in Grollman, 1967) also emphasized the close relationship between intellectual development and the development of ideas about death.

Koocher (1973; 1974) interviewed 75 children who ranged in age from 6 to 15 and who participated in summer enrichment and recreational programs. The Piagetian conservation tasks of mass, number, and volume, as well as

the final task of hypothesis testing, were administered to each child to obtain a measure of cognitive functioning. On the basis of their responses, children were designated as preoperational, concrete operational, and formal operational. The children were asked four questions concerning death: (1)What makes things die? (2)How can you make dead things come back to life? (3)When will you die? (4)What will happen then? Responses to these questions were rated by independent judges. Results confirmed Koocher's hypothesis that children's responses differed as a function of the child's level of cognitive development.

The concrete or formal operational children provided more abstract and generalized reasons than the preoperational children to the question, "What makes things die?" Essentially, they provided more realistic explanations for the cause of death. In response to, "How do you make dead things come back to life?" 40% of the preoperational children suggested ways in which this could be achieved, whereas none of the concrete or formal operational children considered this to be possible. Children's replies to the query, "When will you die?" ranged from an age of 7 to an age of 300! Although the means for the different groups were similar, much more variability existed in the preoperational children's estimate of when they would die than in those made by the concrete or formal operational children. The variance for their predictions decreased significantly with an increase in the level of cognitive functioning.

A wide diversity of replies were given to the question, "What will happen when you die?" The majority of the children (52%) made references to being buried; 21% indicated going to heaven or hell, being judged, or made other references to an afterlife; 19% suggested a funeral; 10% made predictions on how they would die; 10% indicated that they did not know what would happen; 7% made reference to sleeping; 5% answered by being remembered by others; 4% made references to reincarnation; and 3% made references to cremation. Of some interest was the finding that only 7% used the word "God" in response to this question. Koocher (1973; 1974) concluded that a child's concept of death was not solely a function of age as a wide range of ages existed in the three categories. He further suggested that the child's level of cognitive development plays a functional role in the child's understanding of death.

White, Elsom, and Prawat (1978) conducted a study to investigate the relationship between level of cognitive functioning and the child's understanding of the concepts of irrevocability, cessation of bodily processes, and the universality of death. A total of 170 children from kindergarten through to fourth grade were selected from three public schools. The procedure involved an initial assessment to determine if children were nonconservers or conservers. Each child was presented with three conservation tasks (conservation of substance, of continuous quantity, and of discontinuous quantity) and was labelled as a

conserver if both the response and justification of a response were correct for at least two of the three tasks. Following this, the children were read the story of an elderly woman's death. Half of the children in each grade were read a version in which the lady was a likeable, very kind, friendly, and humorous person, whereas the other children were read the version in which the lady was presented as being unkind, she yelled at children, and she never laughed. To elicit the children's ideas on the specified concepts of death, they were asked general questions which referred to the story and which were tape-recorded and transcribed. Two judges independently rated each of the children's responses utilizing scoring criteria developed prior to the testing.

Subjects were grouped by grade (age) and by level of cognitive development. Findings revealed that children's understanding of the universality of death was significantly related to the child's grade level with the greatest increase in understanding occurring between the first and second grades. This was related to the Piagetian idea that this is the period when children learn that there is a universality of rules and that whatever happens to anyone, it happens to all alike. However, children's understanding of the irrevocability and of the cessation of bodily functions after death was independent of their grade level. This study reported that these concepts were understood by less than 50% of the fourth-grade students.

When the children were grouped as nonconservers and conservers, almost equal percentages in both groups understood the concepts of cessation of bodily processes and irrevocability. Such was not the case with the concept of universality which was understood by 62% of the conservers but was not understood by 62% of the nonconservers. White et al. (1978) suggest that a cognitive developmental framework is more useful in classifying responses related to universality than just the grade or the age of the child.

A somewhat interesting but unexplainable finding was that more males than females understood the concept of cessation. Further analysis revealed that the story variable (kind versus unkind lady) was related to the cause that the child attributed to the death. Although 22% of the children who were read the story of the unkind lady explained her death as attributable to some unkind act she had performed, only one child in the other group attributed the death of the kind lady to her own behaviour. The authors suggested that adults assure children who have faced death that it is not punishment for any wrongdoing.

In a replication study of Koocher's work (1973; 1974) but which utilized 14 mentally-handicapped individuals, Sternlicht (1980) re-examined the relationship between the child's level of cognitive development and the child's ideas on death. The participants, who were all designated as preoperational, ranged in chronological age from 10-8 to 19-10 and ranged in mental age from 4-2 to 9-9. Findings

reflected those found by Koocher; preoperational individuals did not have a realistic concept of when they would die nor did they recognize the permanence of death. The cognitive level of the individual, rather than age alone, was considered to be an influential factor in determining the child's concept of death.

E. Experience

The impact of the child's experience with death on his/her subsequent understanding of it has been considered as significant by those who have systematically studied its effects through controlled study as well as by those who have worked directly with children. Observations from both perspectives are essential to a comprehensive understanding of the development of this concept throughout childhood.

In her work, Steiner (cited in Kane, 1975) studied the various attributes of death. Her sample included 60 children: 20 children from nursery school (ages 4 to 5), 20 children from second grade (ages 7 to 8), and 20 children from sixth grade (age 11 to 12). The sexes were evenly distributed throughout each of the three grades. The methodology employed a structured interview which was comprised of two parts. In the first part, three separate objects were presented to each child. The child was then asked if any of the items were alive and if so, how he/she could tell. The same procedure was followed again except this time the child was asked if any of the objects were

dead and how he/she could tell. In the second segment of the interview, each child was shown various pictures and was queried concerning ideas about human death and about killing animals for food. During this time, the investigator also obtained relevant information regarding the child's ideas on different aspects of death as well as the child's experiences with it.

On the basis of her findings, Steiner (cited in Kane, 1975) was able to identify three cognitive levels in the child's understanding of life and death: (1) prelogical mode (2)concrete mode (3) and the conceptual mode. The prelogical level included the nursery children. These children viewed death as reversible; the person would die but could then return. The concrete mode was portrayed by the second grade children. Here, children identified the concrete attributes of death such as the inability of the dead to act or move. In the conceptual mode, which was characteristic of the sixth graders, children understood the inability of the dead to function or eat. Steiner's usage of the terms used to describe her three levels of cognitive understanding of life and death were originated by Piaget in his analysis of the development of thought. Although Steiner obtained information concerning children's experiences with death and she considered that experience and concept development were related, this assumption was not explored in her study.

Peck (cited in Kane, 1975) investigated the influence of social class, chronological age, mental age, and

children's traumatic experiences on the development of the death concept for 144 males between the ages of 3-6 and 9-6. The sample was divided into six age ranges with each age group including 24 males: 8 of these had low IQ's; 8 had average IQ's; and 8 children had high IQ's. Social class was evenly represented in each IQ grouping. Peck utilized a checklist type of questionnaire to arrive at the child's concept of death. Scoring of the children's responses was based on the five stages which had been outlined previously by Anthony (1940).

Although Peck (cited in Kane, 1975) attempted to find five stages, none of the children in her sample reached the fifth stage of development. However, the children of Peck's sample reached each of the developmental levels at an earlier age than Anthony's sample of children. Thus, results partially confirmed Peck's hypothesis of differences in levels of understanding death for children of varying ages. Findings indicated a positive correlation between mental age and concept formation when chronological age was held constant, and a positive correlation between chronological age and concept formation when mental age was held constant. However, a stronger relationship was found for chronological age. The variable of social class was not found to be related to the development of ideas about death. To test the hypothesis related to experience, a separate group which had experienced highly traumatic life experiences was formed. They were equated with the nontraumatized group on the other

variables of this study. Results indicated that the child's experiences denoting death, separation, or illness were not correlated to the development of thinking about death. As the experienced group included children who had not experienced a death but another form of loss such as a divorce, one explanation for these findings could be that differential life experiences, although all highly traumatic, might well have differential effects on the death concept.

Kastenbaum (cited in Grollman, 1967) emphasized the importance of experience by pointing out, "Actually, thoughts about death are intertwined with the total pattern of personality development right from the beginning, influencing and being influenced by all the child's experiences" (p. 106). Furthermore, he contended that how the young child experiences and tries to come to terms with separation experiences might influence his/her subsequent ideas of death.

Bolduc's research (1972) compared the level of death concept among 52 children, aged 9 to 14, who had experienced the death of a parent or sibling with 52 children who had not experienced such a death. Children in the two groups were matched for age, sex, intellectual ability, and socioeconomic status. Six hypothetical death situations were used as a cognitive measure of the child's understanding of death. Following the presentation of each of the situations, each child was asked to select one of three choices which

best described his/her response in a similar situation. Each child was then asked to explain the selected choice. This was followed by an interview schedule constructed to obtain information on the child's experiences with different aspects of death.

Analyses of the results indicated a significant difference in the mean death concept between the experienced and non-experienced groups with the experienced children demonstrating a better understanding of death. To examine the hypothesis which purported a relationship between age and the progressive development of the death concept, the means of the different age groups were compared. Results supported the hypothesis when there was more than one year's difference between children of one age level to the next. Response to the interview revealed that children experienced with death had earlier recollections of death, had more deaths among relatives, had a greater tendency to express sorrow for the deceased and his/her relatives, and reported a greater frequency of crying, especially among girls. The children's responses suggested that the death of a parent or sibling may or may not have as strong of an impact as the death of a favorite friend or relative. Hence, children's reactions to death could not be evaluated merely on the basis of degree of relation or age. Bolduc (1972) delineated three levels in the child's understanding of death which included the descriptive level, the causal level, and the inferential level.

On the basis of her counselling work with bereaved children, Zeligs (1974) came to believe that previous experiences with death emotionally prepared a child for death prior to its eventuality in the child's life. She urged parents to permit children gradual experiences with death through the deaths of flowers, insects, birds, and pets. This enabled the child's experiences of death to increase and their understanding of it to grow. Furthermore, she expressed the need for parents to openly discuss death with children, especially in relation to its cause and its finality. She stated:

> A great deal of his fears and fantasies could be allayed if we did not make death a taboo subject but spoke of it freely and factually, so that the child could satisfy his insatiable curiosity about what death is, the cause of the death of someone, and where people go when they die. But he senses the evasion and subterfuge of the taboos against talking freely with his parents, about the meaning of death, and learning that death is part of life. (p. 35-36)

The content of the child's meanings of death, the development of his/her thoughts on death, as well as the impact of experience on those concepts were investigated by Kane (1975). Children's ideas were elicited during open-ended interviews which occurred either in a school setting or the child's home. The interview responses of 122 children ages 3 to 12 were scored according to the absence

or presence of ten components of death that Kane had distilled from the available literature pertaining to the development of the death concept in children.

Findings indicated that the components of realization, separation, immobility, irrevocability, causality, dysfunctionality, universality, insensitivity, and appearance are present in children's thinking. The component of personification, identified in previous research, was not found in this study. The results revealed that these components developed as a function of age between ages 3 to 9 and unevenly in ages 10 to 12. For example, by age 3, children had acquired the concept of realization; by age 5 they had acquired the concepts of separation and immobility; by age 6 they had acquired the concepts of irrevocability, causality, dysfunctionality, and universality; by age 8 they had acquired the concept of insensitivity; and by age 12, the concept of appearance was present. A comparison of means for experienced and inexperienced children of the various age levels indicated that the means of experienced children were significantly different in the 3 to 6-age-range but not in the older age groups where there was a tendency for the child's conceptualization to be the same, irrespective of age. Kane (1975) suggested a three-stage developmental process which she related to Piaget's stages of the preoperational, concrete operational, and formal operational modes of thinking. In the first stage, children described the structure of the dead in terms of position, immobility,

and separation. Death was a description; a person was dead if he could no longer move. During the second stage, death was an explanation and a cause; that is, death made the body no longer work. Death was described in terms of function. The third stage involved more abstract thinking about death; death occurred when the body no longer functioned.

Kolls (1977) described the impact of her own children's experience with death and stressed the positive effects of sharing this experience with children. A first hand experience with death provided her children the opportunity to develop feelings of compassion, sympathy, sorrow, and grief, and thereby contributed to their emotional development. Through sharing the experience of these feelings with adults, children are offered models of behaviour that can assist them to cope with other deaths which they are required to face during their lifetime. The author speculated that denying her children the opportunity to share their concerns and questions about death might have adversely affected their thinking about death and hence, their emotional well-being.

Bluebond-Langner (1978) demonstrated the effects of experience on the child's thinking about his/her own death by observing 40 terminally-ill children in a large hospital setting. She found that a child, even as young as 18 months, could come to an awareness of death as an irreversible and final event. Furthermore, she noted that some 3 or 4-year-old children of average intelligence had more

awareness of their prognosis than a more intelligent 9-year-old who was in the initial stage of his/her illness. She attributed this difference to the child's level of experience. It was observed that the self-concept of these children progressed through five stages before they acquired a view of themselves as dying. However, certain information about their illness was required before children could move from one stage to the next; specifically, the child had to undergo certain types of experiences with his/her illness which provided the child with the knowledge to progress to the next level. She postulated that age and intellectual development were not significant to the child's understanding. Rather, she emphasized the ability to synthesize and integrate information, an ability that she contended was experience-related. Indications that the children understood their prognosis and its meaning were revealed in the following: a fear of wasting time; preoccupation with disease and death; avoidance of discussions about the future; concern that things were done immediately; anxiety about increased debilitation; and increased death imagery in their art, literature, and play.

In contrast to Nagy's (1948) findings that before age 5, death is viewed as reversible; death is personified in children age 5 through 9; and death is viewed as a biological process, a final event by age 9, Bluebond-Langner (1978) found these characteristics to be evident in all age groups and to even occur simultaneously. Hence, she stressed

the importance of examining variables of social, psychological, and intellectual experiences and concerns as primary considerations for future study in this area.

Other researchers working with terminally-ill children (Binger et al., 1969; Vernick & Karon, 1965) have also concluded that children become aware of their prognosis and impending death, even if adults have tried to shield the child from such an awareness. These authors have pointed to the events in the child's environment which were experienced by the child and which contributed to their knowledge. For example, children soon learned that those children who were placed in individual rooms were gravely ill and that death was expected. Furthermore, Binger et al. concluded that children, even as young as 4 or 5, could recognize the seriousness of their illness and its probable fatality.

Kalish (1981), who has written extensively on the topic of death , has proposed that while the ultimate meaning of death remains the same, the perception of that meaning for any individual is altered throughout the lifespan. The differing life experiences and life situations, as well as the historical and the cultural context of each age group, contribute to the meaning that death holds at any one time. In reference to children, Kalish contends that their attitudes and feelings about death reflect numerous factors which include: (1) the knowledge that they have acquired from peers, parents, and others in their environment; (2) their personal experiences with death and with separation;

and (3) the child's level of cognitive understanding and development. Hence, he considers both experience and cognitive understanding as influential on the formation of ideas about death.

Summary

The study of children's thinking about death has been approached from a variety of perspectives. As some investigators (Anthony, 1940; Gesell et al., 1977; Nagy, 1940) found that a relationship existed between a child's age and the child's thinking about death, they concluded that there was a sequential development of this concept. This suggested that children of the same age had similar conceptualizations and that the development of this concept followed a stage-like progression. Others who studied the relationship between age and the child's ideas on death did not formulate stage theories but rather related age to a specific aspect of death such as the relationship between age and irrevocability, the idea that the dead cannot return to life (Childers & Wimmer, 1971; Gartley & Bernasconi, 1967; Melear, 1973; Swain, 1979).

The child's level of intellectual or cognitive development is considered by other researchers to be a more influential factor on the child's understanding of death. This contention has been examined through the use of standardized intelligence tests (Anthony, 1940; Peck cited in Kane, 1975); through the use of Piaget's framework of the

preoperational, concrete operational, and formal operational modes of thinking (Koocher, 1973; 1974; Sternlicht, 1980; White, Elsom, & Prawat, 1978); and through the use of Piaget's stages of animism (Safier, 1964). Others have given credence to ability as a significant factor in the child's comprehension of death (Kalish, 1980; Kastenbaum, cited in Grollman, 1967; Zeligs, 1974). Generally, these studies yielded similar positive findings. However, Anthony found a greater correlation between mental ability and concept attainment than betweenchronological age and concept acquisition whereas Peck found a greater correlation between chronological age and conceptual understanding of death.

The impact of experience on the child's concept of death has been studied by those who have worked with children in a professional capacity (Binger et al., 1969; Bluebond-Langner, 1978; Vernick & Karon, 1965) or by those who have empirically investigated this question (Bolduc, 1972; Kane, 1975; Peck cited in Kane, 1975). The first group have based their findings on observations of children, generally terminally-ill children who are faced with their impending death. Those investigators who have studied the influential effect of experience on the child's thinking of death through empirical methods have generally based their conclusions on an interview format during which children were asked direct questions related to their ideas on death. With the exception of Peck's study, results have demonstrated the positive impact that experience with death

has on the child's developing ideas of death. Further, Bluebond-Langner postulated that the child's experience of death was a much more influential factor on the child's understanding of death than were age or intellectual ability.

Statement of the Problem

The preceding investigations provided some of the background for the development of the present study. While the factors of age, cognitive development, and experience have previously been found to be related to the child's comprehension of death, they have not been examined simultaneously.

This study was designed to contribute to current literature by investigating the differential effects of these factors on one group of children. On the basis of the review of findings presented in the literature, the research hypotheses of this study were formulated.

Research Hypotheses

1. There will be a sequential increase in children's concept of death (CD) score with an increase in age.
2. Children who have a higher level of cognitive development will have a significantly higher CD score than those children at a lower level of cognitive development.
3. Children who are experienced with death will have a

significantly higher CD score than children of the same age who are inexperienced with death.

Research Questions

A further purpose of this study was to broaden current understanding by examining the nature of children's experiences of death. Thus, specific research questions were posed to suggest areas of future study. These are outlined below.

1. When children are asked to define death, do descriptions vary as a function of age? If so, what is the nature of these differences for different age groups?
2. Do children believe in a life after death?
3. What is the frequency of the various types of experiences of death reported by children?
4. What are the types of feelings described by children who have been exposed to the death of a pet or a significant other?
5. What is the nature of children's discussions about death with their parents and with their friends?
6. What are children's attitudes toward discussion of death during school?
7. What are the types of explanations offered by children to describe the lack of human functioning after death? Do these descriptions vary as a function of age, cognitive development, or experience?

CHAPTER III

Methodology

The intent of the current research was to examine children's conceptual understanding of death in relation to experience, age, and level of cognitive development. Previous research demonstrated that these factors contributed significantly to the child's cognizance of death. The present investigation sought to determine the differential effects of these factors on the nature of the child's concept of death. Furthermore, an inquiry into children's experiences with death was implemented to glean information on the diversity of experiences that conceivably contribute to children's understanding of this concept.

A. Subjects

The 88 children who participated in the study ranged in age from 5 years, 7 months to 10 years, 11 months and attended either the primary or the elementary school in a small, semirural town in southern Manitoba. The sample consisted primarily of Mennonite children. Although the majority of the children were Caucasian, one or two of the children were of Canadian native origin. The children reported a variety of parental occupations which included secretaries, factory employees, teachers, nurses, lawyers, doctors, and farmers. It is considered that the various occupations of the parents of these children is a fair representation of the background of children who resided in

this community. Equal numbers of males and females comprised the sample; 44 males and 44 females participated. The number of males and females in each age level are presented in Table 3.1.

Mennonites are organized into numerous sects which have distinct social customs and practices. Behind this diversity, the Mennonites are unified in their belief that religion should be the central focus of one's life. The strong influence of their religious faith is expressed in their view of death and has resulted in some unique funeral practices. For example, children are generally involved in funeral attendance, even at a relatively young age. Due to these strong religious influences, their understanding of death may vary somewhat from those held by children in the general population.

B. Selection of Subjects

Obtaining children to participate in the study proved to be one of the most difficult aspects of this research as approval was required at four levels: (1) initial approval of the school board or school division, (2) teacher and principal consent, (3) parental consent, (4) and the child's consent. In addition, a further selection criteria was grade level because only those children in kindergarten through fourth grade were required for purposes of this study.

The initial approval occurred at the school board or school division level. Considerable obstacles were

Table 3.1

Composition of the Sample by Age and Sex.

Age	Sex		
	Male	Female	Total
5-7 to 7-0	10	10	20
7-1 to 8-6	15	18	33
8-7 to 10-11	19	16	35
Total	44	44	88

encountered by the author in obtaining the sanction of a participating school board in the vicinity of Edmonton, Alberta, the author's place of residence. In a letter outlining one board's refusal, it was suggested that an interview of this type would be perceived as too threatening and could provoke unknown fears in children. Similar types of explanations were offered by another school board in the Edmonton region who also refused permission. The difficulty in obtaining approval was such that the author was required to travel to another Canadian province to obtain children who could participate in this study.

The second level of approval was that of the participating teachers and principals. Although no refusals were given at this level, one principal expressed the concern that many parents might call the school in response to the consent letter sent home to the parents. Teachers were concerned that the interview might be too disruptive to classroom activities. Through careful scheduling of interview times with the teacher, this concern largely diminished and no complaints of this nature were brought forward. If a teacher opposed the interview, this was not voiced to the researcher but teachers were observed to have differential interest in the study. Some actively expressed interest and asked questions about the study and its results while others merely complied with the request but showed no further interest.

Parental consent to the research constituted the third level of approval which was obtained by sending letters to parents of all the children in kindergarten through fourth grade in the participating schools. The letter explaining the nature of the study as well as the parental consent form are found in Appendix A. A total of 360 letters were sent home with the children, but positive responses were limited to 96. While only 27% of the parents responded favourably to the request, the remaining 73% either neglected to return the consent form to the school or else refused permission. A further possibility was that some parents may not have seen the letter as some children may not have given the letter to their parents.

The low percentage of positive returns suggests that adults in our society do not advocate discussions about death with children. However, there were some parents who verbally expressed to the author their interest in knowing what their child thought about in relation to death; furthermore, they stressed the importance of addressing this important issue with children.

A variable that appeared to influence parental consent was the child's age. It was observed that while some parents consented to the involvement of an older child, such consent was not forthcoming for their younger child.

The fourth level of consent occurred with the child. Some parents indicated that although they were interested in the results of the study, they had allowed their child to

decide whether or not the child wished to be involved. At times, children would want to be interviewed as a friend had been interviewed and then asked to return the consent form to the school after the study was well in progress. Also, at the beginning of the interview, each child was given the option of not answering a specific question if he/she did not wish to respond to it.

C. Site

The data was collected in the late spring of 1984 and occurred over a 4-week period. As it was considered that some parents might be more likely to offer consent if the study took place in the their own home, parents were given the option of either a home or a school interview. Home interviews were chosen for 30% of the entire sample and the remaining 70% occurred in the school. Although the percentage of home interviews at each grade level remained consistent with the overall percentage for the most part, a notable exception was the kindergarten group in which more than half of the interviews took place at home. One likely explanation for this was that the parents considered that the younger child would be more relaxed at home and therefore would respond more readily to the interview. One or two parents did cite this reason for selecting home interviews.

However, another possible explanation could be related to the adults greater need to protect the younger child,

especially in relation to the topic of death. They would best be able to watch over their child if the interview was in their home, where it could be observed. Other parents reported that they had elected a home interview because they were curious about their child's ideas on death and were interested in the nature of the interview. The percentage of home interviews and school interviews for each grade level is provided in Table 3.2.

In the school setting, children were interviewed in offices that were available and free from interruptions. The sites of school interviews remained the same throughout the study whereas more flexibility was evident for the home interviews which occurred at kitchen tables, in living rooms, in family rooms, in dens, or even in the child's bedroom on one or two occasions. None of the parents actually sat in on the interview but in a few instances parents occupied themselves in an adjacent room and listened to segments of the interview. For the most part, children attended very well to the topic and were not unduly distracted by household activities such as doorbells and other children's voices.

D. Design of the Study

The child's experience with death, the child's age, and the child's level of cognitive development were designated as the three independent variables in this research. The impact of these independent variables on the child's concept

Table 3.2

Percentage of Home Versus School Interviews by Grade Level.

	Grade				
	K	1	2	3	4
Home	54%	18%	26%	30%	30%
School	46%	82%	74%	70%	70%

of death, the dependent variable, was under investigation. The study was a 2x3x4 factorial design with the first factor representing experience or inexperience with death, the second factor indicating age groupings, and the third factor referring to the level of cognitive development. A more detailed account of each factor is presented in the following sections.

Experience

Children were assigned into two groups on the basis of their prior experiences with death-related events. The first group included those children who were "experienced" with death whereas the second group was comprised of those children who were considered to be "inexperienced" with death. The determination of a child as experienced with death required that the child met one of several conditions which follow: (1) the child had experienced the death of a significant other such as a parent, sibling, grandparent, close friend, or close relative; (2) the child had attended at least one funeral; (3) the child had seen at least one dead person. These events should have taken place following the child's third birthday. The inexperienced group entailed all the children who had not been exposed to any of the preceding conditions. Information on the child's involvement with various death-related events was acquired through the interview procedure which included some questions that specifically focused on the child's experiences with death.

Occasionally, parents were asked to clarify the child's age at the time of a grandparent's death when the child expressed uncertainty as to the precise age of this occurrence.

Age

The child's age was the second independent variable of this study. For purposes of analyses, three age groupings were established. The first age group included those children from age 5-7 to 7-0 (the first numeral denotes years whereas the second numeral indicates age in months and henceforth will be written in this shortened form). Children aged 7-1 to 8-6 comprised the second age group. The third age group was made up of the remaining children who ranged in age from 8-7 to 10-11. The total number of children present in each of the three age groups were 20, 33, and 35, respectively. At least 10 males and 10 females were included in each age grouping while a minimum of six inexperienced and six experienced children were also present in each grouping. Due to the small number of children who were inexperienced with death at each age level, it was impossible to analyze the results for age groupings with smaller ranges.

Cognitive Development

The third variable of this study was the child's level of cognitive development. In order to secure a measure for

this variable, the Piagetian conservation tasks of amount, weight, and volume were administered to each child. Children were then assigned into one of four groups depending on the number of correct responses they had made to these tasks. Group 1 constituted those children who had not made any correct responses and were considered to be preoperational. The children in Group 2 had made one correct prediction which marked the onset of the concrete operational stage. Group 3 consisted of those children who had provided two correct responses and who represented the middle stage of concrete operations. Group 4 was comprised of those children who made 3 correct responses and who reflected the later stage of the concrete operational period.

There were several reasons for selecting Piaget's measure of cognitive ability rather than using a version of the more commonly-used and standardized intelligence tests. First, the initial part of the interview involved a question-answer type of format and it was desirable to change the type of activity to maintain a high interest level. Secondly, research on Piaget's theory has repeatedly demonstrated a sequential development in the acquisition of conservation tasks. The acquisition of a conservation task thereby provides a simple way of identifying children of varying levels of cognitive development. Thirdly, some of the concepts introduced by Piaget are useful in understanding the development of the child's concept of death and have been used by previous investigators (Bolduc,

1972; Kane, 1975; Koocher, 1973, 1974; Sternlicht, 1980).

E. Concept of Death

The child's concept of death was designated as the dependent variable of this study. Information for this concept was acquired by individually interviewing each child regarding his/her understanding of the various components of death. These components were immobilty, separation, irrevocability, causality, dysfunctionality, universality, insensitivity, and appearance. Each of the questions from 2 to 9 in Appendix B examines a separate component; the order of the components cited above represents the order that the components were investigated during the interview.

Children's responses for each component were assigned a value of "2," "1," or "0." The sum of the scores of the eight components was considered to represent the child's current concept of death (CD) with a maximum possible score of 16. A description of each component and its scoring criteria are provided in the scoring section of this chapter.

As these components were originally obtained by distilling them from unstructured interviews (Kane, 1975), the present investigator designed the interview schedule for this study. This was necessary since a specific format to examine these aspects of the death concept had not been formulated previously.

F. Procedure

In order to elicit parental consent, a letter describing the basic purpose and structure of this study was sent home with each child in kindergarten through the fourth grade. Following receipt of positive returns, either parents or teachers were contacted to arrange interview times. The interview consisted of two parts; the first portion explored the child's understanding and experiences of death whereas the second segment was designed to obtain a measure of the child's cognitive development. Children's responses to the first portion were tape-recorded and later transcribed.

Part 1

The interview began by the introduction of the investigator as a student who was interested in learning about children's ideas. At this time, the format of the interview was explained; the child would be asked some questions and then he/she would be asked to do some science experiments. Following this, the child would be given a small gift for helping the investigator "Learn more about how children think." Children were told that there were no right or wrong answers to any of the questions which they would be asked. Furthermore, they were informed that if there was a question to which they didn't know the answer, they could say, "I don't know." To eliminate potentiating any anxiety related to the questions, children were advised to say, "I don't want to answer that one," for any question

which they did not wish to answer.

The development of rapport between the child and the investigator occurred on the walk from the child's classroom to the interview room or during the initial introduction at the family home. Prior to the presentation of the questions related to the topic of death, children were asked to tell the author everything that they knew about the words party, book, and toy. This further contributed to the development of rapport but also established the format of the interview.

The presentation of the interview questions followed a predetermined order. However, when a child's initial response was not easily understood and further clarification was needed, the question in parentheses was asked. For example, to obtain a child's thoughts on the universality of death, that is, the notion that everyone dies, the child was asked, "Who dies?" Thus, if a child had responded to this question by stating "grandmas and grandpas," then the question in parentheses, "Does everybody die or only some of the people?" would be used to clarify the child's response. General queries such as, "Tell me more about that"; "How come?" and "Why do you think that...?" were used throughout the interview to elaborate on the child's thinking. This flexibility in questioning was necessary to acquire the best indication of the child's ideas on death. Furthermore, this contributed to an easy and relaxed flow to the discussion.

The questions concerning the child's concept of death were followed by questions which focused on the child's

experiences with it. These are also presented in Appendix B. Various childhood experiences of death were examined, some of which included: the death of a pet, the death of television characters, death as presented in the child's reading, death as portrayed in Sunday School or church, the death of a classmate, the death of a family member, and attendance at a funeral. Interspersed with the questions about the child's experiences were questions about the child, such as a favorite television program or his/her family. These were interjected not only to break the focus on death but to maintain the child's interest in the event that he/she was unable to answer the other questions.

At the conclusion of the first segment, each child was asked if they had anything else that they wished to say about death. This provided the child the opportunity to discuss any concerns, thoughts, or feelings that might have been evoked by the interview; the purpose was to help relieve any anxiety that might have arisen. Most children had no further comments although several children asked for some clarification of aspects related to their experience of death.

Part 2

During the second portion of the interview, three Piagetian conservation tasks were administered to each child. A detailed description of the tasks and the format which was followed are located in Appendix C. The

presentation of these tasks was similar in form to that employed by many investigators of Piaget's theory (Phillip, 1975) and therefore, need not be discussed extensively. Generally, the procedure required each child to predict if changing the shape of two identical play-dough balls changed their respective amounts, weights, and volume. While the presentation of the tasks remained constant, some necessary fluctuation in questioning occurred when the child was asked to explain his/her predictions for the tasks. Children's responses and explanations were recorded by the investigator during the interview.

Each interview lasted approximately 30 minutes although there was some variability, depending on the loquacity of the child. Following the completion of the interview, children were presented with a small gift in appreciation for their participation.

Scoring: Components of the death concept

The scoring system for the child's concept of death was based on the format developed by Kane (1975). However, in addition to the components used in this study, she had included the component of realization. This component was measured by the child's ability to pick out a dead rabbit from a series of pictures. As Kane found that all children past the age of 3 had acquired this component, it was not included in the present study since the youngest children who were interviewed were at least 5 years of age.

Children's responses for each component were scored separately. According to the scoring system, a score of "2" was awarded when a child demonstrated the complete presence of a component. A score of "1" denoted an incomplete presence of the component; and a score of "0" was assigned when the child stated, "I don't know," shrugged, shook his/her head, or otherwise indicated to the investigator that the answer was not known. The total score of these constituents provided a measure for each child's concept of death. The eight components of the child's death concept and their respective scoring criteria are discussed in greater detail in the following section.

Information concerning the reliability and validity of this scoring system were not reported by Kane (1975). In the present study, point-by-point agreement ratios were computed for each of the eight components to obtain an indication of the reliability of the scoring procedure. These are provided in the results section of this study.

Immobility

This aspect of the death concept referred to the lack of bodily movement following death. The question, "What kinds of things can a dead person do?" was used to elicit children's ideas on this component. A score of "2" was assigned when a child's response suggested that all external bodily movements have stopped. Some examples of 2 - point responses included: "Nothing, they can't do anything (Query) because they're dead"; "Can't

move at all"; "Nothing, because when you are dead you are paralyzed"; "Just lie there. Can't do anything because you are dead. When you are dead you just lie still."

Responses which demonstrated that there may be partial movement or the deceased may be involved in specific activities would be designated a score of one. This score was given to a response such as, "Well, maybe he could move his fingers just a little bit."

Separation

The component of separation referred to the location of the dead. Responses to the question, "Where are they?" were scored for this component. The dead could be described as absent or present. If a child's response suggested the idea that the dead person was absent, away permanently, or in some location separate from the living, a score of "2" was given. Children were assigned a score of "2" for responses which included: "Up there in the sky"; "Buried in the ground"; "In a grave"; or "In heaven." A score of one was given if the child's response indicated that the deceased was only away temporarily or if the child identified a place which was not generally associated with the dead, such as "In the streets." However, when a child's answer suggested that the dead person was still with them, but was present in the form of a spirit, the child was still given 2 points if the child realized that the personage

of the deceased would never return.

Irrevocability

The aspect of irrevocability investigated the child's understanding of death as a permanent state, that is, the awareness that the dead cannot return to life. The question, "Can you make dead things or people come back to life?" provided responses for this component. Answers which implicated death as permanent received a score of "2". Some 2 - point examples were: "No, but God can"; "No, because when they're dead...they just don't ever come back to life again"; "Nope, (Query) they're always dead." Some children cited examples in which this had previously occurred such as the Biblical account of Lazarus who was raised from the dead by Jesus, or else they stated that God or Jesus could make dead people come back to life. Others suggested that only magic or a very special power could make it happen. A few children supplied examples in which a person had been revived after having been considered to be clinically dead. These responses were still considered to merit 2 points if the child recognized it as a rare or special event. When children's answers suggested that death was only a temporary state or that the dead person could return, they were assigned a score of one. An example of this type of response was: "They might only be dead for a little bit and then they'll come back to visit me."

Causality

The component of causality explored the reasons provided by the children to explain the causes of death. To elicit ideas for this constituent, the children were asked, "What makes people die?" Children who provided internal or both internal as well as external causes were awarded 2 points. Examples of 2 - point responses included: "Maybe a heart attack, stroke, maybe they got killed in a car accident, maybe they got shot, maybe they got run over by a car"; "Well, they could just be killed, or they could have, just maybe, just got too old or got sick." Explanations which were based on only external factors received a score of one. Some examples of 1 - point responses were: "People killed 'em'"; "By shooting them"; "Snakes bite them, or alligators eat them; lions could"; "Sour things like poison which they eat."

Dysfunctionality

This component examined the child's awareness of the cessation of bodily functions following death. In order to obtain children's ideas on this aspect, they were asked, "Do things work in people's bodies after they die?" When children's responses revealed an understanding that bodily functions are not present after death, their responses were scored a "2". Some 2 - point responses included: "No, (Query) cause you couldn't do anything cause the blood stops flowing and

your heart stops pumping and you couldn't see and then your brain would not work and tell your body what to do and all that"; "Once you die everything stops and you can't do anything." When a child's answer implied that some functions continued to exist, a score of one was given. The 1-point responses were exemplified by the following: "Their nerves still work"; "They can drink only a little bit, but they're not supposed to drink." This type of response was further illustrated by a five-year old who stated, "Umm, a little bit," and then went on to explain that the heart would beat and you could breathe, "Only a little bit."

Universality

The child's understanding that all people are mortal was explored with the component of universality. The question, "Who dies?" was used to generate children's ideas. Responses which suggested that all people die were given a score of "2" and included the following types of answers: "Everybody has to have a time when to die"; "Jesus did...Lots of people do. Everyone will, sometime"; "Umm, like anyone could die." Responses which indicated that the child would not die but everyone else would or that only some people would die were given one point. For example, one child replied that "People die." After a further query she stated, "all the people die," but when asked if she would die, she replied, "Only if someone else kills me." An idea of

this type was logically inconsistent; therefore, it reflected an incomplete presence of the component.

Occasionally, a child stated that everyone wouldn't die and then elaborated by saying that some people, who lived until the end of the world, wouldn't die. This idea was based on Biblical references which suggest that those people, who are living at that time and who love God, will be taken up to heaven by Jesus. Thus, they will never die. In this instance, a child was credited with 2 points if the child considered that all people up to that time would die.

Insensitivity

The component of insensitivity measured the child's understanding of the insensate nature of death. While the components of dysfunctionality and insensitivity both investigated the cessation of bodily functions, the component of insensitivity specifically examined the child's awareness of the cessation of the sensory functions. This included the functions of thinking, feeling, dreaming, smelling, tasting, seeing, hearing, and remembering. These functions were considered to be less active and therefore, less obvious that the other bodily functions.

To elicit ideas on this aspect, the child was asked if a dead person could do such things as see, smell, taste, feel, or hear. A score of "2" was awarded when the child's answer suggested that all sensory functions

ceased following death. Examples of 2-point responses included: "Because it's one of your senses and all your senses are gone"; "You can't do any of those things any more because you are dead and nothing works any more."

When the child's responses indicated that all or some functions continued to be present after death, a score of one was assigned. For example, one child indicated that while a dead person could no longer smell, hear, or think, the dead person could still feel his/her clothing. Another child implied that although a dead person could no longer smell or hear, the dead person might be able to remember his/her childhood.

Appearance

The child's understanding of the appearance of the dead was measured by this component. The questions: "How do you know when someone is dead?" and "What do they look like?" were used to evoke ideas for this concept. To obtain a score of "2", the child's answer suggested that appearance may or may not resemble the person when they were alive, but in some aspect of appearance, the dead were distinguishable from the living. These aspects could include such features as: "They're limp"; "They look so pale and stiff"; "Their face is so white." A good example of this type of response was provided by a student whose grandfather had died: "when he wasn't alive anymore, somehow he looked so faint, and it looked like his face was all stretched and ooh, it didn't look

like him at all...He didn't have any life in him. He just didn't look quite right." A score of one was given to those responses that referred to other aspects such as the heart stopped beating or they no longer moved. For example, one boy answered, "Then you try waking him up, pushing him around, then you try standing him up and then they don't move, and you know they are dead."

Throughout the interview, the investigator was often required to make a distinction between whether or not a question referred to the capabilities of the dead while on earth or while in heaven. This appeared necessary since many of the children believed that while movement was possible in heaven (presumably after the person had been resurrected and had received a new body in heaven), movement was no longer possible while on the earth or in the grave. Thus, in scoring the responses, the religious beliefs of the children were considered. These religious beliefs were taken into account in scoring not only the question on immobility, but also the questions on irrevocability, dysfunctionality, and insensitivity.

One judge scored all of the children's responses while a second judge scored the protocols for half of the children to obtain interjudge reliability data. Both judges were graduate students in educational psychology who had taken courses concerning death-related issues.

Scoring children's predictions on the Piagetian tasks followed acceptable scoring responses established by investigators of Piaget's theory (Phillip, 1975). Although each child was asked to explain his/her prediction, credit was given on the basis of their prediction rather than their explanation. In this way, those children who had difficulty in verbalizing their explanations would not be at a disadvantage.

The correct prediction for the first conservation task was that both the sausage-shape and the ball still had the same amount of play-dough since they both had the same amount when they were identical ball-shapes. Credit for the weight task was given if the child indicated that the weights of the sausage-shape and the ball were the same, even though the shape of one of the original balls had been changed to resemble a sausage. A correct response for the volume task required the child to make two predictions. First, the child had to predict that both play-dough balls would make the water rise equally in the two jars. Then, the child had to indicate, despite the transformation of one of the balls into a sausage-shape, that the water would still rise equally in both jars.

Children were assigned to one of four groups on the basis of the responses they had made to the conservation tasks. Children in Group 1 had not made any correct predictions; children in Group 2 had made one correct

prediction; children in Group 3 had made two correct predictions; finally, children in Group 4 had made three correct predictions.

G. Data Analysis

The three major hypotheses of this study were tested by using 2 two-way anovas. The first anova examined the factors of age and experience while the second anova included experience and cognitive development. This analysis was preferable to a three-way analysis due to the high correlations frequently reported between age and cognitive development.

The secondary purpose of this study was to investigate several research questions. The responses to some of these questions were examined with the use of Chi-square analyses. The children's responses regarding their experiences of death were also analyzed descriptively. This was essential due to the voluminous information that was provided by the respondents during the interview process.

H. Summary

The purpose of this study was to examine the impact of age, cognitive development, and experience on children's conceptual understanding of death. The relationship between an increase in the child's age and the increase in awareness of death has frequently been reported in the psychological literature. Thus, the first hypothesis posed that children

of varying age groups would have different levels of understanding about death.

The close association between cognitive development and the child's concept of death has also been reported in the research. Children at a higher level of cognitive development have been observed to have more developed concepts of death than children at a lower level of cognitive ability. The second hypothesis posited that children at different levels of cognitive development would demonstrate differential understanding of death.

The effect of the child's prior experience with death on the child's thinking about death has also been explored. Those children experienced with death have been found to have more developed conceptualizations than those children of the same age group who are inexperienced with death. The third hypothesis was that there would be a significant difference between children experienced with death and children inexperienced with death for each age level.

Specific hypotheses for the research questions investigated by this study were not formulated. However, findings to these research questions may serve to generate research hypotheses for future studies.

CHAPTER IV

Results and Discussion

The impact of the variables of age, prior experience/inexperience with death, and cognitive development in relation to the formation of the child's concept of death were explored. This chapter begins with an overview of the nature of the awareness of death found in these children. Then, the results of the three major hypotheses and the findings to the research questions are reported. Children's responses to the questionnaire on their experiences with death are incorporated in the discussion of the research questions. The results are discussed in relation to previous research and Piaget's theoretical framework.

A. Nature of the Concept of Death

Children's responses to the questions investigating the eight components of death provided an indication of their understanding of death. Each response was assigned a score of "0", "1", or "2". A survey of the distribution of scores revealed that a score of "0", indicating no response or no understanding of a component, was seldom given. The occurrence of a score of "1", assigned when a child exhibited partial understanding of a component, was observed with considerably greater frequency than a "0" and followed several trends. First, younger children received more 1-point responses than did older children. Second, the

components of insensitivity and appearance received more (at least twice as many) 1-point responses than all the other components combined. Overall, the majority of the responses were assigned a score of "2". This suggested that as a collective, this group of children demonstrated well-developed ideas on the eight different constituents which comprised the concept of death.

The percentage of children who demonstrated complete understanding of each component, that is, they received a score of "2," are provided in Table 4.1. An examination of Table 4.1 reveals that the components of immobility, separation, and irrevocability were very well understood by the entire sample. The constituents of causality, dysfunctionality, and universality were present in similar proportions in each age group. While the majority of the children who were age 7 or older had complete understanding of these components, approximately two-thirds of the children in the youngest age group (5-7 to 7-0) also demonstrated complete understanding of causality, dysfunctionality, and universality.

Insensitivity and appearance were not as well understood as the other components. However, understanding of these appeared to increase as children became older. A comparison of these results with those reported by Kane (1975) revealed somewhat similar findings. She found that immobility and separation were acquired first, generally by age 5. Irrevocability, causality, dysfunctionality, and

Table 4.1

Percentage of Children by Age Group with Perfect Scores for Each Component of Death.

	Age		
Component	5-7 to 7-0	7-1 to 8-6	8-7 to 10-11
Immobility	80%	100%	97%
Separation	90%	100%	100%
Irrevocability	95%	94%	97%
Causality	65%	97%	94%
Dysfunctionality	70%	97%	86%
Universality	70%	94%	89%
Insensitivity	45%	58%	66%
Appearance	0%	21%	29%

universality were present concurrently by the age of 6. Insensitivity was acquired by age 8. (However, in the present study, complete understanding of this component was evident only for two-thirds of the children in the 8-7 to 10-11 age group.) Kane observed that the constituent of appearance was well understood by age 12.

A partial explanation for the minor discrepancies between the findings of the present study and Kane's (1975) work in relation to the components of insensitivity and appearance may be based on procedural differences. The same questions were presented to all respondents in this study whereas Kane's procedure was unstructured. Consequently, it may well be that all aspects of insensitivity such as thinking, feeling, seeing, hearing, touching, tasting, smelling, remembering, and dreaming were not presented during Kane's interview. Often, children in the present study would consider some aspects such as hearing or sight to be absent but might consider that the dead person could still feel, think, or remember. While age levels were collapsed in the present study, Kane examined the components by each age level. This procedural difference may also contribute to the observed fluctuations.

In order to obtain a measure of the reliability of the scoring procedure, half of the protocols were scored by two judges. The replies of every second child (Subject 2, Subject 4, Subject 6, and so on) were used to generate this reliability data. A more conventional type of correlational

analysis was not appropriate due to the high frequency of a score of "2" which would have revealed a high correlation but not necessarily an accurate description of the true agreement between the two judges. Furthermore, as Kazdin (1982) has suggested, "The correlation merely assesses the extent to which scores go together and not whether they are close to each other in absolute terms" (p. 58).

Thus, the point-by-point agreement ratio was selected to compute the scoring reliability. Essentially, this method assesses whether agreement on each occurrence of a behaviour is present. According to Kazdin (1982), an advantage of this methodology is that it can point out exactly the sources of any disagreements. The point-by-point agreement ratio was computed for each of the eight components. The overall percentage of agreement between the two judges, the percentage of agreements on a score of "1", and the percentage of agreements on a score of "2" were calculated for each component. The results of these computations are given in Table 4.2.

The percentages shown in Table 4.2 indicated that the overall agreement between the two judges for each of the components exceeded 85%. The designation of a score of "2" revealed similar high percentages for each component with the exception of appearance. This component received an agreement ratio of 67%. Considerably greater variability on agreement for a score of "1" was evident. While agreements were high for the components of immobility, irrevocability,

Table 4.2

Percentage of Agreement on Scores for Each Component.

	Agreement		
Component	Overall	Score "1"	Score "2"
Immobility	100%	100%	100%
Separation	95%	33%	95%
Irrevocability	100%	100%	100%
Causality	98%	83%	97%
Dysfunctionality	86%	25%	86%
Universality	93%	57%	93%
Insensitivity	89%	71%	84%
Appearance	93%	92%	67%

causality, and appearance, the components of separation, dysfunctionality, universality, and insensitivity were considerably lower with agreement ratios of 33%, 25%, 57% and 71%, respectively. These findings suggest that for these latter components, it is more difficult to differentiate between responses which merit a score of "2" and those which receive a score of "1". This consideration would also apply to the component of appearance which had a 67% agreement ratio for assigning a score of "2", since the majority of responses to this component received a score of "1". Furthermore, it was observed during the scoring process that in most cases, a score of "2" was more readily apparent than a score of "1".

B. Analysis of Results

The results of this study were analyzed for the effects of age, experience, and cognitive development on children's concepts of death. The first hypothesis stated that there would be significant differences in understanding of death between children of various ages and that this understanding would increase with age. The relationship between cognitive development and the child's concept was the focus of the second hypothesis. It posed that children of a higher level of cognitive development would have a greater understanding of death than children at a lower level of cognition. The third hypothesis postulated that when the age level was held constant, children experienced with death would have better

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developed ideas than children considered to be inexperienced with death.

Statistical analyses involved the application of 2 two-way anovas. The factors of age and experience were examined in the first analysis-of-variance, and experience and cognitive development were the factors of the second analysis. The outcome of each anova is discussed separately.

The findings of the first analysis are presented in Table 4.3. Results yielded a highly significant main effect for age (F score = 10.28, df = 2, p .00), indicating that understanding of death is a function of the child's age. The first hypothesis of a significant relationship between age and conceptual understanding of death can be accepted at the .00 level of significance. A significant main effect for experience was not demonstrated (F score = 1.63, df = 1, p .21). Thus, the third hypothesis which purported a difference in CD scores between children experienced and inexperienced with death at each age level is not confirmed.

Post hoc comparisons, using Scheffé tests, were performed to examine the significance of the differences between the means for each age level and to determine the direction of these differences. The Scheffé technique was selected over other multiple comparison methods since the groups compared had unequal numbers of subjects and it permitted the simultaneous comparison of more than two means (Ferguson, 1981).

Table 4.3

Analysis of Variance Age X Experience

Source of Variation	df	Variance	F	Significance of F
Main Effects				
Age	2	15.64	10.28	0.00
Experience	1	2.48	1.63	0.21
2-way Interaction				
Age X Experience	2	1.59	1.05	0.36
Explained	5	8.93	5.87	0.00
Error	82	1.52		

The findings of these comparisons are reported in Table 4.4. From an observation of the means, an increase in the mean CD scores between children of the youngest age group (age 5-7 to 7-0) and the two older age groups (age 7-1 to 8-6 and age 8-7 to 10-11) is apparent. Results of the Scheffé confirmed that the mean of the youngest age group was significantly different from the two older age groupings (p .01). No real difference in understanding of death between children age 7-1 to 8-6 and children age 8-7 to 10-11 was present. These findings suggest that age as an influential factor on the child's comprehension of death may only be present until the age of 7, after which its impact is no longer significant.

The outcome of the second anova (experience x cognitive development) is shown in Table 4.5. This analysis investigated the hypothesis that children of higher levels of cognitive development would have significantly higher CD scores than children at a lower level of cognitive development. Findings revealed a significant main effect for cognitive development (F score = 7.64, df = 3, p .00), a significant main effect for experience (F score = 4.46, df = 1, p .04), and a significant two-way interaction between cognitive development and experience (F score = 3.25, df = 3, p .03). At the p. 00 level of significance, the main effect for cognitive development confirmed that the child's level of cognitive development is significantly related to the child's CD scores.

Table 4.4

Scheffé Comparison of Mean CD by Age Level

	Age		
	1	2	3
M	13.00	14.61	14.57
n	20	33	35

Comparison of Means	Scheffé Analysis	
	F Value	Significance
1 and 2	21.25	$p < 0.01$
1 and 3	20.71	$p < 0.01$
2 and 3	00.02	$p > 0.10$

Table 4.5

Analysis of Variance (Experience X Cognitive Development)

Source of Variation	df	Variance	F	Significance of F
Main Effect				
Experience	1	6.31	4.46	0.04
Cognitive Development	3	10.80	7.64	0.00
2-way Interaction	3	4.59	3.25	0.03
Explained	7	8.06	5.70	0.00
Error	80	1.41		

A main effect for experience was also found in the second anova. Findings demonstrated that while a main effect for experience was not present when children of different age groups were compared, a main effect occurred when children of differing levels of cognition were involved. The main effect of an interaction between cognitive development and experience sheds further light on the nature of this relationship. Thus, the effects of the child's experience/inexperience with death do not have similar effects across all levels of cognitive development.

The source of this interaction is illustrated in Figure 1. From an examination of this graph, it appears that the total scores of children inexperienced with death differ significantly from those experienced with it for Group 1 (lowest level of cognitive development). Further inspection of Figure 1 reveals that while the total scores of the experienced group for each of the levels of cognitive development do not appear to vary substantially from each other, the scores of inexperienced Group 1 children differ significantly from the scores of inexperienced children at the other levels of cognitive development. Overall, Group 1 children seem to differ from Group 2, Group 3, and Group 4 children in the attainment of total scores. More parallel trends in development are evident between the other groups where scores are in close proximity; however, Group 2 children deviated slightly with higher scores for those inexperienced with death than those experienced with death.

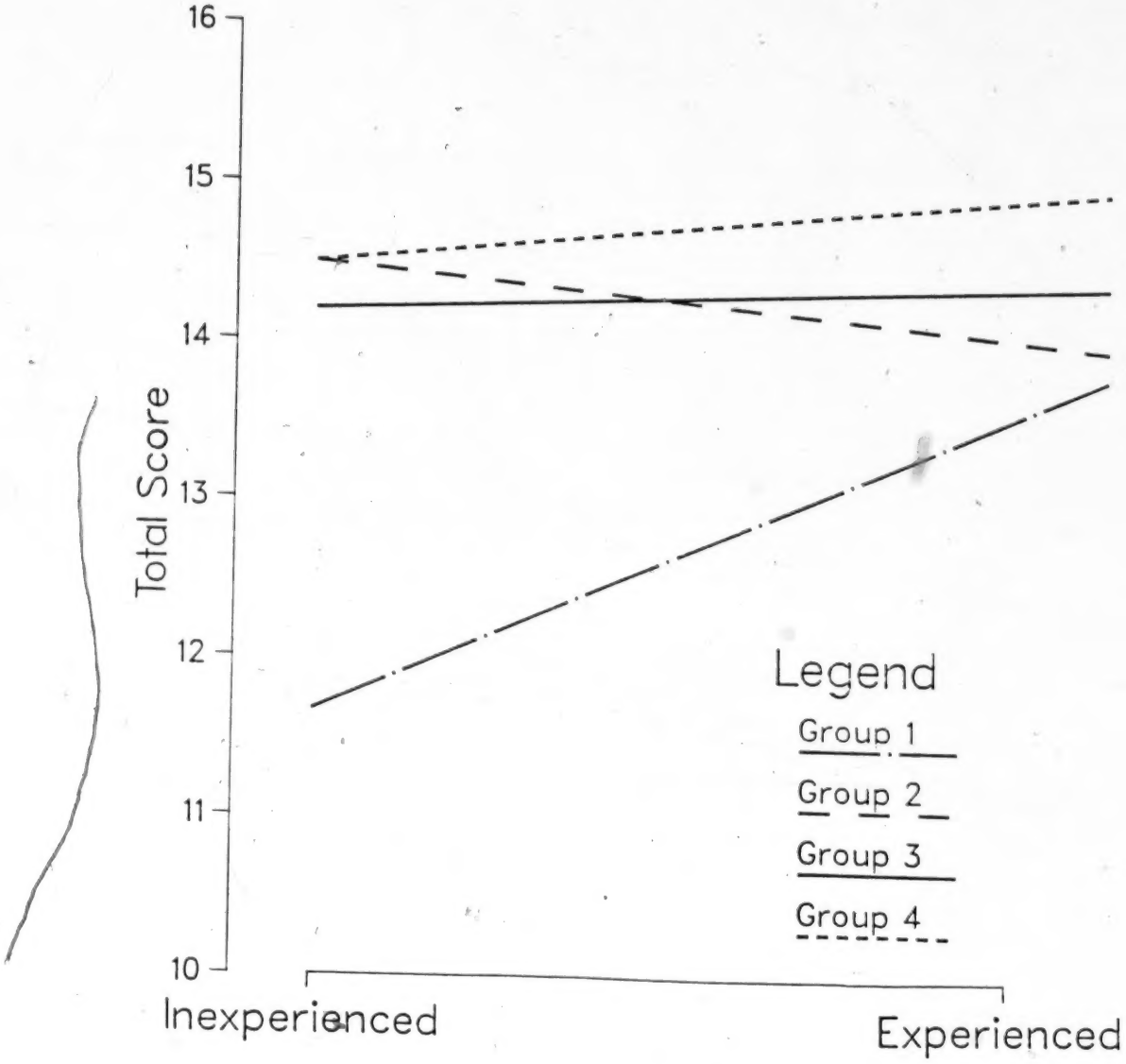

Figure 1. Interaction Effects between Experience and Levels of Cognitive Development on the Child's Concept of Death.

Scheffé comparisons for the various trends indicated by Figure 1 were calculated. Results of the comparisons between inexperienced and experienced children in Group 1 confirmed significant differences at the .01 level ($F = 12.70$, $df = 3$). Further application of the Scheffé test between inexperienced and experienced children in Group 2, Group 3, and Group 4 for all possible comparisons, revealed no significant differences. These findings are provided in Table 4.6.

As an observation of Figure 1 had suggested that the scores of inexperienced children in Group 1 appeared to differ from the scores of inexperienced children in Group 2, Group 3, and Group 4, further comparisons were computed. The outcome of these analyses revealed that inexperienced Group 1 children differed significantly from the other groups of inexperienced children. However, none of the comparisons among these other groups were significant. The statistical findings of these analyses are reported in Table 4.7.

Comparisons of means between experienced children in Group 1, Group 2, Group 3, and Group 4 yielded significant differences between Group 1 and Group 4 children at the .10 level of significance ($F = 6.95$, $df = 3$). Considering the rigorous procedure involved in the application of the Scheffé test, Scheffé recommended the .10 level as an acceptable indication of significant differences (Ferguson, 1981). The other possible comparisons of pairs of means were not found to be significant. See Table 4.8.

Table 4.6

Scheffé Comparison of Mean CD by Experience/Inexperience.

	Cognitive Development			
	1	2	3	4
Experience	13.82 (n=11)	14.00 (n=14)	14.40 (n=20)	15.00 (n=22)
Inexperience	11.67 (n=6)	14.50 (n=4)	14.20 (n=5)	14.50 (n=6)

Comparison of Means	Scheffé Analysis	
	F Value	Significance
1 and 1	12.70	P < 0.01
2 and 2	0.56	P > 0.10
3 and 3	0.11	P > 0.10
4 and 4	0.81	P > 0.10

Table 4.7

Scheffé Comparison of Mean CD for Inexperienced Children.

	Cognitive Development			
	1	2	3	4
Mean	11.67	14.50	14.20	14.50
n	6	4	5	6

Comparison of Means	Scheffé Analysis	
	F Value	Significance
1 and 2	13.58	P < 0.01
1 and 3	12.31	P < 0.01
1 and 4	16.69	P < 0.01
2 and 3	0.14	P > 0.10
2 and 4	...	...
3 and 4	0.17	P > 0.10

Table 4.8

Scheffé Comparison of Mean CD for Experienced Children.

	Cognitive Development			
	1	2	3	4
Mean	13.82	14.00	14.40	15.00
n	11	14	20	22

Comparison of Means	Scheffé Analysis	
	F Value	Significance
1 and 2	0.13	P > 0.10
1 and 3	1.70	P > 0.10
1 and 4	6.95	P < 0.10
2 and 3	0.94	P > 0.10
2 and 4	5.88	P > 0.10
3 and 4	2.57	P > 0.10

When inexperienced and experienced children were combined and comparisons were made between all the groups of cognitive development, results indicated that children in Group 1 varied significantly from each of the other three groups. However, these remaining three groups did not differ significantly from each other which is apparent from an examination of Figure 1. Results of these final analyses are located in Table 4.9.

In summary, the analysis of the results of this study found that age was an influential factor on the child's concept of death prior to the age of 7, after which its effect was not found to be significant. Experience with death had considerable impact for children at the preoperational level of development (Group 1) but was not a significant factor for children in the concrete operational period. The effect of cognitive development on the child's concept of death was significant only for Group 1.

C. Research Questions

Several research questions were posed to generate ideas for potential future areas of exploration. Information for most questions was obtained by examining and tabulating children's responses to the interview questions which focused on the nature of the children's experiences with death. The outcome for each research question is discussed separately in the following section.

Table 4.9

Scheffé Comparison of Mean CD by Level of Cognitive Development.

	Cognitive Development			
	1	2	3	4
Mean	13.06	14.11	14.36	14.89
n	17	18	25	28

Comparison of Means	Scheffé Analysis	
	F Value	Significance
1 and 2	6.81	P < 0.10
1 and 3	12.07	P < 0.05
1 and 4	25.18	P < 0.00
2 and 3	0.46	P > 0.10
2 and 4	4.71	P > 0.10
3 and 4	2.63	P > 0.10

When children are asked to define death, do descriptions vary as a function of age? If so, what is the nature of these differences for different age groups?

A survey of children's replies to the question, "Tell me everything that you know about the word 'death'," indicated similar types of responses. Depending on the type of responses they had given, children's definitions of death were assigned into one of seven categories. (Since all of the possible categories could not be predicted prior to the study, these were established following the collection of the data). These categories were: (1) Death was defined by describing the appurtenances or events which follow it such as funerals, burial, graveyards, or going to heaven. (2) Death was described as "deaf", that is, "You can't hear." (3) I don't know. (4) Death was defined as a lack of functioning of one or more bodily parts or systems. (5) Death was described by the child's revelation of his/her emotional reactions to it. (6) Death was defined by providing an example of someone who had died. At times, it was of someone familiar to the child and at other times, the child simply stated that "Someone has died" or "Someone is no longer alive." (7) Death was described as the result of a cause such as an illness, old age, or heart attack. When children's responses included more than one category, their first response was considered in designating the appropriate category.

A Chi-square analysis was performed to determine if children's descriptions varied as a function of age, cognitive development, experience, or sex of the child. A significant Chi-square value ($F = 21.70$, $df = 12$) at the .04 level of significance was found for the age factor. None of the other factors were found to be significant. Results of these analyses are reported in Table 4.10.

The percentage of responses in each category when results were analyzes for the age factor are shown in Table 4.11. An increase in descriptions of death in terms of its appurtenances or events which follow it occurred with an increase in children's age. While only 10% of the responses of the youngest group included this category, this comprised 20% of the descriptions offered by the oldest children.

The tendency to describe death as though it were "deaf" decreased as the age of the children increased. Presumably, the increase in ability to auditorily discriminate between sounds as children become older accounts for this observed difference. When all of the children in the sample were considered, 13% responded to a description of death in this manner. This finding suggests careful consideration of the usage of the word "death" in death-related research, especially when young children are involved. Perhaps a more readily understood word would be "dead".

As children's age increased, they were less likely to respond "I don't know" to this question. Thirty-five percent of the responses of the youngest group included this choice.

Table 4.10

Chi-Square Analysis for Definitions of Death by Age, Experience, Cognitive Development, and Sex.

Factor	Chi-Square	df	Significance
Age	21.70	12	0.04
Experience	10.56	6	0.10
Cognitive Development	23.08	18	0.19
Sex	7.46	6	0.28

Table 4.11

Percentage of Types of Definitions of Death by Age Level.

	Age		
Definition	5-7 to 7-0	7-1 to 8-6	8-7 to 10-11
Appurtenances/ Events	10%	12%	20%
Deaf	20%	16%	5%
Don't Know	35%	12%	5%
Lack of Function	10%	3%	5%
Emotional Reaction	5%	21%	8%
Fact of Death	20%	24%	40%
Cause	-	12%	17%
Total	100%	100%	100%

Indeed, some of the children may have responded in this way because they may have been unclear as to whether a definition of "death" or "deaf" was required. Although speculative, this possibility should not be overlooked.

Death described as a lack of functioning comprised a relatively small percentage of response-type for any of the three age groups. Death described by revealing an emotional reaction to it occurred infrequently for the youngest and oldest age groups but was the response given by 21% of the middle age group (age 7-1 to 8-6).

As children's age increased, there was an accompanying increase in descriptions of death as the act or the fact of someone having died. This description indicates a more abstract formulation of the definition of death and is aligned with its common dictionary definition. Similarly, there was an observed increase in children's descriptions of death in relation to its causes from no responses of this type in the youngest group to 17% of the responses in the oldest age group.

In summary, children age 5-7 to 7-0 most frequently described death as "I don't know, as "deaf", or as the fact of someone having died. For the second age group (7-1 to 8-6), death was most frequently described by the fact of someone having died, by expressing an emotional reaction to it, or it was defined as "deaf". Finally, the oldest group most frequently defined death as the fact of someone having died, by indicating the appurtenances or events which follow

death, or else they attributed causation to it.

Since the factors of experience, cognitive development, and sex were not found to be significant, it may be that a partial explanation for age as significant may be related to the similarity in teaching instruction which is received by children of the same age group.

Do children believe in a life after death?

In response to this question, 83% of the children made references to life in heaven. The influence of the religious training given to these children was apparent in the type of responses they gave. Some children pointed out that accessibility to heaven was conditional; one could enter only if one loved Jesus or God, if one had been a good person while living on the earth, or if one was a Christian. Occasionally, a child would offer a description of his/her notion of heaven. One child (age 8-0) reported that in heaven, "You'll never get tired. You don't need to rest. You can always play and eat all the time. They say you look younger there."

Most of these children considered heaven as the human's destination after death; however, some of the children cited both heaven and hell as ultimate destinations, depending on the type of behaviour that the individual had manifested during his/her earthly life. While the term "hell" was used by some children, others referred to it as "Satan's place" or "the devil". One child (age 7-9) merely pointed downwards

with her index finger and stated "down there." Subsequently, she revealed that she really didn't want to say the name of the place to which she was referring.

The remaining 17% of the children did not mention any form of an afterlife to this question. Some of these merely responded by stating "no", others indicated that they didn't know, and a few children provided answers which were not readily understood. (This type of response was given by one or two of the younger children who might not have understood the question).

Thus, the majority of these children believed that one lives on in heaven after one dies. Reincarnation was not suggested although several children indicated that sometimes they felt the presence of the soul of a person who had died previously. One child (age 8-8) described this presence: "Well, like my grandma, she died and her soul's still around me. (Query-What's it like to have a soul close by you?) Like it's kind of neat. It's just that you can't see them but you still, you umm, you sort of keep that soul in your heart."

What is the frequency of the various types of experiences of death reported by children?

These students provided considerable information on the nature and diversity of their experiences with death. Death viewed on television and reactions to its occurrence were investigated as were the presentation of the theme of death in children's books, in church or Sunday school, in school,

at home, or through discussions with the child's friends. The children's direct experience with death such as the death of a family member or friend, funeral attendance, or having seen someone who was dead were also explored.

Most of these children (89%) affirmed that they had viewed the occurrence of death on television. Furthermore, they were able to provide the names of more than 40 different programs or movies in which this had been observed. Some types of shows were named more often than others; most frequently cited were detective or police shows. Following this, a specific movie was identified. Horror and adventure programs were next. Cartoons were occasionally named whereas news, hospital shows, soap operas, family-type shows, cowboy films, science fictions, or documentaries were seldom mentioned.

Children's reactions to the portrayal of death on television suggested a diversity of emotions. Of those children who had seen death on television, 45% stated that they felt sad or felt sorry that the death had occurred. Of these, 4% stated that they had cried while watching television. One girl (age 10-4) stated that at the same time she was laughing, "Cause it's funny that I'm crying cause it's just a TV show." Ten percent stated that they only felt slightly sad or sorry since it wasn't real. Thirteen percent indicated that they didn't feel anything because television wasn't real. Six percent responded that their feelings depended on who it was; if the "good guy" was shot they

would feel badly but if the "bad guy" was shot, they would feel good. The children who revealed some aversion to seeing blood, shooting, or other visible features of death represented 10% of the total while 3% reported that, at times, they became frightened while watching television. Those children who reported "I don't know" to this question comprised 10% of the responses. One child (age 7-4) replied that he felt both anger and sadness; he felt anger because someone was shot by others and sad because of the resulting death.

When children were asked to recall any stories which reminded them of death, 52% could not recall any whereas 48% reported on the types of stories which had elicited such ideas. A variety were listed which included animal stories, fairytales, science fiction, Bible stories, adventure stories, and biographies (the story of Helen Keller). One child indicated that she had been read a story which talked about the death of a grandparent (shortly after her grandparent's death) whereas another child had read a story that focused on what the child thought about dying. Thus, only 2 children in this sample recalled reading or hearing a story that specifically dealt with the topic of death.

The majority of these children attended Sunday school or church. Furthermore, their responses revealed that the topic of death was mentioned more frequently in church or Sunday school than in school. While 74% of the children recalled talking about or hearing someone else talk about

death in their church, only 26% of the children reported that their teacher in school had talked about it.

In the church setting, conversations about death centred around the following types of circumstances: (1) The funeral of a church member was announced in church. (2) The child overheard a conversation during which the death of someone was mentioned. (3) The child was read Bible stories in which death occurred, such as the story of Lazarus or the death of Jesus on the cross. (4) One child heard expressions of sympathy at church when her grandmother died. (5) Children reported that death was mentioned by the minister during his sermon. One child (age 6-7) indicated the frequency of this topic by stating, "almost every Sunday." Although children might not recall the specific circumstances, Bible stories and sermons were most frequently cited as instances which referred to death. However, very few children reported a specific circumstance during which the children were actively engaged in the discussion.

Only 26% of the children confirmed that a teacher had talked to the class about death. The circumstances of this occurrence usually involved a brief mention of death without further elaboration. At times, the teacher would tell the class about the death of a relative and on other occasions, a child would inform the class of the death of someone during a "show and tell" session or during a time of sharing. Only one child in this study recalled that a

teacher had talked to her class about death following the death of a classmate. The general pattern of classroom discussion on death was well described by a child (age 7-10) who stated of his teacher: "He mentions about it sometimes but we have never really talked about it." Further elaboration on this point was provided by another child (age 8-10), "No one has ever talked to us about death. No one was assigned to teach that."

A total of 7 children remembered the death of a classmate while another 7 children recalled hearing about the death of a child in another school. Thus, the majority of these children had never experienced the death of a classmate or any student in their school. When a child is no longer in attendance at school, this absence may not be explained to children. As one child (age 8-8) explained, " Well, he got really, really sick and I never saw him again. And I was wondering if he died or not. Like I think he died."

When children were asked to think back to the time that they had first heard about death, 33% described a personal incident during which death had become known to them. This generally involved the death of a pet, the death of someone familiar, being told of the death of a relative whom the child had never known, hearing of the death of a sibling who had died prior to or during early infancy, and attendance at a funeral. A further 28% did not know or could not recall the time of this occurrence while 26% provided an age when

this had occurred. Ages 3,4, or 5 were frequently named as the time at which death was initially known to them. Five percent indicated that the present interview was their first exposure to death. For the remaining 9%, a movie, an overheard conversation, a specific book, or a discussion with a parent/parents provided the child's first awareness of death.

The acquisition of information concerning death was attributed to several sources. Children who deemed their parents as responsible comprised 38% of the total and an additional 16% considered that they had derived their information solely from their mothers. While some children (17%) expressed that they had come to know about death when someone familiar to them had died, others did not know how they had learned (15%). Five per cent claimed that they had always known about it. Sunday school, church, or school were suggested by another 5%. Two children pointed to the present interview as the time when they had learned about death. Books or movies were named by three students. One boy (age 8-8) responded that, "In the first book I got about death was a month ago. Well, I read about death. I know how I can <u>feel</u> about death now."

One of the processes by which children learn about death is well described by a boy (age 10-5) who confessed, "When people die, people, they always talk about it. Then, I sort of perk up and listen what it's all about."

The designation of children as experienced or inexperienced with death for the entire sample was 76% and 24%, respectively. According to the criteria, 76% of the children had either experienced the death of a family member or friend, had attended a funeral, or had seen a person who was dead. The percentage of children who had or had not experienced the death of a family member are shown in Table 4.12. (As more than one death had occurred in a few children's families, the total percentage may be greater than 100).

The number of funerals attended for each age group are reported in Table 4.13. The funerals of grandparents, great grandparents, or great aunts/uncles were attended most frequently. Few children in the study had experienced the death of a parent. Occasionally, children stated that although they had attended a funeral, they did not remember the name of the person who had died nor did they recall their relation to that person. Traditionally, Mennonite children have been included in funerals for individuals who are not necessarily a part of the immediate family; this explanation may account for the inability of some children to recall the individual who had died. The reported age of attendance at funerals ranged from an age of 2 to the child's current age. (One child stated that she had been age one but a consultation with the mother revealed that the child had been 3 at the time of the death).

Table 4.12

Death of Family Member for Children of Varying Age Levels.

Age	Death of Family Member			
	Parent/ Grand Parent	Aunt/ Uncle Cousin	Great Grand Parent/ Other Relative	None
5-7 to 7-0	35%	5%	25%	40%
7-1 to 8-6	33%	9%	27%	42%
8-7 to 10-11	31%	20%	37%	26%

Table 4.13

Funeral Attendance for Children of Varying Age Levels.

Age	Funeral Attendance			
	None	One	Two	Three or More
5-7 to 7-0	55%	40%	5%	
7-1 to 8-6	33%	27%	30%	9%
8-7 to 10-11	23%	37%	26%	14%

Children expressed varying interest in funeral attendance and diverse information about it. One child (age 7-6), who had been unable to attend his grandfather's funeral, expressed that he had wanted to see his grandfather in his coffin at the church whereas another child (age 7-8) had not been to a funeral and stated that she wouldn't want to go because, "It would be too sad." Some children considered that an invitation to attend a funeral was necessary whereas others realized that anyone could attend. One child (age 8-0) offered an account of her own funeral: "Let's say I died when I was 89... And when I die they put me in a coffin. They read a bit from the Bible and lots of people cry. Then there is music and lots of people go round the coffin." Another child (age 8-6) expressed that he experienced both anger and sadness at a funeral. He had directed his anger at God for making the person die. Additional descriptions of some children's perceptions of a funeral are presented in Appendix D.

The vast number of children who had experienced the death of a family member or who had gone to a funeral had also seen an individual in the state of death. The viewing of the body is an important feature of the Mennonite funeral service and is widely practiced. Usually, the body is presented prior to the service and then it is viewed again when the people in attendance file past the person who has died. Table 4.14 depicts the number of dead individuals that the children of each age level had seen. While these

occurrences usually coincided with the death of a family member or funeral attendance, several children reported that they had seen a person who was dead while they visited a funeral home with their parents.

What are the types of feelings described by children who have been exposed to the death of a pet or a significant other?

The loss of a pet through death had been experienced by 76% of the participants. For those children who had experienced such a loss, a feeling of sadness was reported by 78% while an additional 10% revealed that they had cried at that time. Feelings of regret ("I felt sorry") were expressed by 4% while feelings of both anger and sadness were expressed by 3% of the children. Only 3 children indicated that they had not cared that their pet had died; however, one of them subsequently revealed that she had cried.

Children were asked to recall the content of their parents comments to them following the death of their pet. Over 61% either could not remember or stated that nothing had been said. Approximately 18% had been told that they could obtain another pet. Children with parents who informed the child about the circumstances of the death without further comments accounted for 4%. The disposal of the dead pet had been the focus of two conversations. Several children reported that their parents had told them not to be

Table 4.14

Number of Dead People Viewed by Children of Varying Age Levels.

	Number Seen			
Age	None	1	2	3 or > 3
5-7 to 7-0	60%	35%	5%	-
7-1 to 8-6	30%	46%	21%	3%
8-7 to 10-11	26%	28%	26%	20%

sad and animal heaven had been suggested to one or two children. Just a few replies revealed that parents had attempted to comfort the child. One child (age 7-9) recalled her parent's reactions: "I forget what they said but what I do know is that they were very, very sad."

Children who had experienced the death of a family member most often expressed a feeling of sadness. However, explanations for these feelings varied. Some replied that they had been sad because they would not see that person again; others commented that they were sad because the individual had died. Some children (especially older children) were more likely to describe a personal reason: (1) The person had always done special things with the child. (2) The child would miss them. (3) Visits with them were so much fun. Several children revealed that they had cried while one or two pointed out that they had not cried but had just watched.

One child expressed that he had felt both happy and sad; happy because the person went to heaven and sad because they had died. Another child (age 7-1) revealed some ambivalence about what should be felt and what she really felt: "We are not supposed to be sad because we are supposed to be happy because we are going up to heaven." Subsequently, she indicated that she had felt sad when her grandmother died. Only one child recalled that he had been scared when he had first heard news that his grandfather was dying.

What is the nature of children's discussions about death with their parents and with their friends?

Discourse on the topic of death between parent and child was the focus of one of the interview questions. The greater proportion of children either replied that they never discussed death or they didn't know the answer to the question (39%) or else they had discussed it (38%) when a family member had died. Approximately 9% indicated that they had talked about the causes of the deaths of certain individuals or the circumstances of a funeral. Six percent had discussed the death of an individual who was not a family member such as a popular media figure or perhaps someone known to the family. One child (age 9-2) reported that her mother, who was a nurse, informed her family about the death of someone at the hospital. The curiosity surrounding death was explored by this child: "Well, when she says someone died I think it just seems interesting to talk about that so I keep asking questions and then I'll ask more and more." The death of a family pet generated conversations about death for 3% of the children. A further 3% stated that the first time they had talked about it was when their parents received the letter outlining the current study. In the entire sample, only one child revealed that feelings of sadness concerning death had been discussed.

Children were asked whether they talked death with their friends. Forty-four percent replied that they did not converse about death whereas 45% indicated that they had

told their friends about the death of a relative, about a dead relative, about the death of a pet, or about the death of another individual known to the child. Five percent had discussed the events surrounding the death such as the causes or the manner in which it had happened. The remaining 6% of the children had either discussed the present interview with their friends, had talked about the possibility of the death of an ill person, or had talked about the death of a movie character. Only one child (age 6-7) revealed that his friends had asked him about his feelings concerning death, that is, whether he was sad or scared.

On the basis of children's remarks, it was apparent that some children did not wish to discuss death with their friends. One child (age 8-8) replied: "No, I don't really want to talk about it. (Query - Why don't you want to talk about it?) It will give me back more memories. I don't, like I want to try to forget about it" (the death of grandparents). Other reasons were given for avoiding the topic of death. "It's something sad and they might make fun of me" was reported by one boy (age 9-0). Another child (age 9-4) described an incident during which a friend had told the class about the death of his grandmother and after school children had teased his friend about it.

<u>What are children's attitudes toward discussion of death during school?</u>

The participants were requested to give their opinion as to whether or not students and teachers should talk about death in school. Positive and negative responses yielded similar percentages; however, slightly more children (41%) disagreed that it should be discussed as compared to 36% who believed that it should. Another 23% were undecided on the question.

Various reasons for its exclusion from school discussions were presented. Foremost was the explanation that it was more important to learn other things in school (25%). Another common justification was that discussion of death could evoke feelings of sadness or could provoke crying in the children (19%). Some children thought that it could scare them or other children (14%) whereas others claimed that it was not polite to speak of it (14%). Consideration of death as a private matter which should not be shared with everyone was suggested by 8%. Some children (11%) were unable to explain their choices. Two children were concerned that bad dreams could ensue from such a discussion whereas one child reasoned that it was the parent's responsibility to discuss death with children.

Several explanations revealed considerable insight into the taboo nature of death. One boy (age 7-0) expressed that, "Some people don't like that kind of talking because they don't like to hear about it very much." An older student (age 9-4) suggested, "There are people that are in school in kindergarten that are too young to learn about people that

have died."

Death as a topic for school discussions was advocated by others. Sixty-nine percent of these either suggested that children would then be able to learn about it or else that children wanted to learn about it. One girl (age 9-10) explained, "Well, some of the kids' parents might have died and they just can't accept the thought and they want--they should--learn more about it. (Query-Anything else?) Well, sometimes you don't know what death means. Some kids are scared of it. Some still think there are a bunch of ghosts which is not the right thing." Sixteen percent were unable to provide a reason for their choice. One child expressed the idea that it should be discussed since the person who died had been an important person in the child's life while another indicated that it would be acceptable to speak about it if it was part of the curriculum. Finally, several children thought that conversations about death would prevent some children from fearing it. One of them (age 10-0) commented, "Actually, it's good to hear about it sometimes and sometimes not. Like, somebody dies you don't like hearing about it, but if you learn about it first, then it might not -- then you get to know it a little better.

<u>What are the types of explanations offered by children to describe the lack of human functioning after death? Do these descriptions vary as a function of age, cognitive development, or experience?</u>

To investigate this research question, children were asked: "Do things work in people's bodies after they die? If not, how come they don't work?" Five separate response categories were established; each response was designated into one of five groupings. The first category consisted of those descriptions which had identified specific bodily processes which accounted for the inability of the body to function (such as the heart has stopped pumping or the brain no longer sends messages to the other parts). These answers implied a relationship between death and bodily functions; that is, death results when bodily functions cease rather than the thinking that bodily functions cease because you are dead. Responses assigned to the second classification made references to restrictions imposed by death such as the body was no longer capable of movement or else the body no longer functioned. For this category, references to lack of functioning were more general; children merely stated that the body no longer worked without attempting to explain a relationship between death and bodily functioning. The third category included responses such as "Because they are dead" without any further explanation. This type of response was considered to be less developed since it was interpreted to imply that death "caused" the body to no longer work. Responses of "I don't know" comprised the fourth classification whereas the fifth category consisted of a variety of responses which were difficult to assign.

An application of a Chi-square analysis revealed no significant relationship for either experience, sex, or cognitive development and children's explanations. Age was found to be a significant effect at the .01 level of significance (Chi-square = 21.11, df = 8). The results for each of these analyses are shown in Table 4.15

The percentage of responses in each category for the three age levels are presented in Table 4.16. An examination of this table indicated some age-related trends. Most of the responses for the youngest age group revolved around the idea that the state of deadness causes the body to no longer function instead of thinking logically that lack of bodily functioning causes death. This type of description was present for 70% of the youngest group but decreased considerably for the older groups. Instead, the two older groups showed an increase in the ability to provide specific and general descriptions that accounted for the lack of bodily function at death. These two categories comprised 48% of the responses of the second age group and 66% of the responses for the oldest age group.

The "other" category reflected an interesting trend; more responses were placed in this category as age increased. A partial explanation for this occurrence may be related to the observations made during the scoring process. It was noted that younger children's answers were less complex than that of the older children and therefore, easier to score. Thus, the increasing tendency may reflect

Table 4.15

Analysis of Explanations for a Lack of Functioning by Experience, Cognitive Development, Sex and Age.

Factors	Chi-Square	df	Significance
Experience	6.90	4	0.14
Cognitive Development	14.04	12	0.30
Sex	0.73	4	0.95
Age	21.18	8	0.01

Table 4.16

Explanations for a Lack of Bodily Function After Death by Age Level.

Age	Explanation				
	Specific	General	They're Dead	Don't Know	Other
5-7 to 7-0	0%	15%	70%	10%	5%
7-1 to 8-6	30%	18%	34%	%	12%
8-7 to 10-11	32%	34%	17%	35%	14%

an increase in complexity and difficulty in scoring with more responses of the older groups assigned to this category.

D. Discussion

Results of the data generated in this study pointed to the influence of the factors of age, level of cognitive development, and experience on the child's developing ideas about death. Specifically, age was found to be a significant factor for children in the first age group (age 5-7 to 7-0), after which its effect was not apparent. Children at the preoperational level (Group 1) differed significantly in their understanding of death when compared to children at the other levels of cognitive development. Prior experience with death had a significant effect only for the preoperational children in this study. The results and implications of each factor are discussed separately.

Age

A comparison of previous research findings with those of the present study offered further support for the role of age as an influential factor on the formulation of children's thinking about death. Swain (1979) also concluded that children aged 5 to 7 varied significantly from her other groups in some aspects of understanding death; further, she submitted that the greatest changes occurred between the age of 5 to 7, a time period when children

entered school and when their views began to resemble those of older children. Increasingly, their orientations toward death demonstrated a greater reliance on biological and social reality. Similarly, the present results may be explained by the conceptual changes in thinking about death which are occurring for children in this age group when they are regularly exposed to the beliefs of other children. Piaget used the term "social transmission" to describe the process whereby children's thinking changes on the basis of the information they learn from other children, parents, teachers, or books (Pulaski, 1980).

During the course of this study, it was observed that parental decisions regarding inclusion of their children in this study appeared to be a function of the child's age. At times, permission was given for the involvement of an older child but not for a younger sibling. Perhaps a further explanation, then, for differing conceptual developments between different ages is related to differential ways of responding to children's comments related to death . It is postulated that parents or adults may differ in the manner and method in which they respond to children's comments or queries concerning death, depending on the age of the child. Perhaps for the younger child, adults foster magical thinking and help the child to maintain unrealistic or illogical ideas since they consider, unwittingly, that realistic explanations would be much too upsetting. Also, they may believe that the child is incapable of

understanding its meaning and implications. Thus, in practice, parents would sustain the child's current orientations either by ignoring or not correcting any of the child's misconceptions. Furthermore, deliberate efforts to teach the child this concept are generally limited.

A corollary to this hypothesis would be that as children become older, parental/adult views modify since they now consider that the child is capable of greater understanding; inadvertently, they are more responsive to older children's comments and illogical ideas. It may be that the age for this occurrence may be somewhere within the range of the 7 to 8-year-old which would account for the observed differences in the present study. While not empirically tested, this hypothesis merits further inquiry.

The finding that the child's concept of death was significantly different for the youngest age group also can be explained from a cognitive perspective. The age of 7 (Wass, 1984) has generally been considered as the transition point between the period of preoperational thought and that of concrete operations. It may be that a greater proportion of preoperational children are in the youngest age group and occur with less frequency in the older age groups. Hence, some of the observed differences between age groups can be explained as a function of cognitive development. In the present study, at least 50% of the children in the youngest age group were preoperational.

This proposition is supported by the present finding that preoperational children differ significantly from concrete operational children in their understanding of death. In future studies, the introduction of matched groups would be helpful in clearer identification of these sources of influence. Unfortunately, it was impossible to obtain matched groups in the present study.

Cognitive Development

The influence of cognitive development on the formulation of the child's overall concept of death was observed; Group 1 children (those children who were designated as preoperational since they had not made any correct predictions on the conservation tasks) differed significantly from Group 2, Group 3, and Group 4 children (those children who represented the concrete operational mode of thinking). Since Group 2, Group 3, and Group 4 children did not differ notably from each other, this suggests that the major change in children's thinking about death may occur between the preoperational and concrete operational stages of thought. Using Piaget's formulations to explain the observed differences (Wass, 1984), Group 1 children would be dominated by more magical, fantasy, and animistic thinking whereas the other groups would represent the onset of logical, concrete reasoning in the child.

Findings in other studies concur with the observed differences in thinking between the preoperational and

concrete operational periods. Koocher (1973, 1974)found that concrete operational children provided more abstract and generalized explanations for causes of death than did preoperational children. For those children in the present study who provided external reasons for the occurrence of death, 50% were in the preoperational level with the remainder scattered throughout the other levels. However, it should be pointed out that only 10 out of a total of 88 children provided external reasons to explain death. Overall, these children represented well-developed ideas for the causes of death.

Koocher (1973, 1974) also found that 40% of the preoperational children suggested ways in which dead things could be returned to life whereas in the present study, this was not observed. In fact, only 4 out of the 88 children had not acquired a complete understanding of the constituent of irrevocability. White et al. (1978) had found that less than 50% of the students in fourth-grade understood this component.

White et al. (1978) had examined the relationship between cognitive development and the components of universality, irrevocability, and cessation of bodily processes. These authors indicated that the concept of universality was not understood by 62% of the nonconservers and was understood by 62% of the conservers. In the present study, the percentage that understood the concept of universality represented 65% of Group 1, 78% of Group 2,

100% for Group 3, and 93% for Group 4. Overall, only 14% of the 88 children did not have complete understanding of this component.

The cessation of bodily processes was not understood by over half of the fourth-grade children in the study by White et al. (1978). This concept (dysfunctionality) was understood completely by 86% of the present sample. The pattern of acquisition for this component resembled that of universality: 65% of Group 1, 78% of Group 2, and 96% of both Group 3 and Group 4. However, a direct comparison of these two pairs of findings should be made with caution since White et al. did not specify their scoring procedure and scoring in the present study was not based on children's explanations. Furthermore, when a Chi-square analysis was performed in the present study, children's explanations were not found to vary as a function of cognitive development.

The contradictory findings between the results of the present study and other research efforts can be discussed from a number of perspectives. First, the concept of death in this study was a cumulative representation of the various components. Overall, preoperational children had a significantly lower cumulative presence of this concept. However, the few studies which have examined Piagetian stages of cognition in relation to death have only included several components. It may be that the acquisition of a component is a function of the child's cognitive level for some components but not for others. Since research has been

very limited and findings inconclusive, further efforts are required to delineate the differental effects of these components in relation to the child's level of cognitive development.

The differences in the patterns of acquisition of certain components between the present study and previous research may be attributed to differences in the scoring criteria, scoring procedures, and the type of question asked of the child. Greater standardization in procedures is required for an accurate comparison of results.

Finally, the influence of the experiential, cultural, and religious background of these children may explain some of the observed differences. Kane (1975) reported that experience of death had much more impact on the components of causality, dysfunctionality, and insensitivity than on the other components. In the present sample, more than three-quarters had experienced death; overall, they demonstrated greater understanding of the components of causality, irrevocability, dysfunctionality, and universality than found in other studies which used similar age groups. Furthermore, it may be that some of the Mennonite funeral practices, such as the regular attendance of children at funerals and viewing of the dead person, contribute to the better-developed understanding of death found in these children. The influence of the religious thinking of Mennonites may also have an impact on children's understanding of death. The potential effect of these

influences must be considered in any comparisons which may be made.

Experience

Previous experience with death was not found to have an effect on the child's understanding of death when children of different age groups were compared. However, when groups of children of varying levels of cognitive development were included in the analysis, results revealed a significant effect for experience for children at the preoperational level. This finding suggests the operation of some processes at this stage of development which contribute to these differences.

Piaget's view (Wass, 1984) of cognitive development provides valuable insights which explain the nature of these changes. He contended that during the preoperational period, children were egocentric; this implied that they lacked the ability to differentiate between their own internal world and the physical world around them. In other words, the child of this stage attributes events to his/her own wishes, thoughts, or actions rather than to actual cause and effect relationships in the external world. The child is unable to distinguish his/her own thoughts as separate or distinct from that of others. Thus, in this subjective world the child may believe that his/her thoughts can actually "cause" some event, such as a death. Furthermore, people are considered to be all powerful and any event, even death, can

be prevented if people try. One can readily surmise the types of erroneous ideas in relation to death which could result.

Interaction with the environment or experiences in the child's world are required before the egocentricity can be replaced by logical, concrete reasoning. In fact, it is through these experiences that the child learns that his/her thoughts are distinct from those of others and from the world around him/her. Consequently, these preoperational children who have experienced direct contact with death have had an opportunity to discover that their previous notions of death are not substantiated by their present experiences. The results of these experiences are revisions in the child's understanding of death. This process has been termed "accomodation" by Piaget (Pulaski, 1980).

During the onset of concrete operations, children learn reciprocity skills. Through this process they are able to vicariously benefit from "the observed experiences of others in thinking about death" (Koocher, 1973 p. 374). Using this explanation for the present study, children inexperienced with death and who were in the concrete operational period would be able to benefit from the experiences of others around them. The finding of no significant differences in the concept of death between inexperienced and experienced children for the concrete levels of cognitive development (Group 2, Group 3, and Group 4) supports this contention.

Kane (1975) reported similar findings; experience as a contributing factor to the child's conceptual development of death only occurred for the 3 to 6-year-old children in her sample. It is likely that the majority of these children would have been preoperational. Given that similar conceptual frameworks and scoring criteria were used in both studies, the replication of Kane's findings offers supportive evidence for the impact of experience on the child's concept of death for preoperational children. Conversely, it suggests that the influence of experience may no longer be as significant after the age of 6 or when children are advancing to the concrete operational stage of thinking.

Cultural/Religious Influences

A discussion of the present results is incomplete without reference to the potential effect of the cultural and religious background of these children. Particularly influential might be their religious beliefs, their view of life after death, their view of death, and their funeral customs and practices.

The portion of the interview which focused on these children's experiences with death provided meaningful insights. The majority (76%) had experienced death either through the death of a family member or friend, had gone to a funeral, or had seen a dead person. Many children had experienced all of these events. Some children had attended

several funerals and had viewed several people who were dead. Attendance at funerals occurred from an early age onwards. Mennonite funeral rites have traditionally included children. Occasionally, children might escort their family to a funeral and view the body of an individual not well known to the child. Finally, children in the present study were observed to acquire understanding of several components of death much earlier than reported in some of the existing research.

Studies investigating religious influences have produced conflicting findings. McIntire, Angle, and Struempler, (1972) concluded that frequency of religious instruction had no apparent effect on the child's concept of death. Swain (1979) found no significant differences in understanding for those children with parents who had a strong orientation to religion and those who had parents who had a weak orientation to religion. Conversely, Mitchell (1966) emphasized the contribution of religious beliefs on the child's comprehension of death. Gartley and Bernasconi (1967) found that all the children in their sample of Roman Catholic school children had acquired the concept of irrevocability and generally evidenced an earlier understanding of death than reported in previous studies.

Thus, while results appear conflicting, further study in needed. Empirically-based, comparative studies between various cultural and religious groups are required to determine if differences in attainment of a concept of death

can be attributed to the unique values and beliefs expressed by various religious groups.

Summary

The preceding discussion highlighted the unique effects of age, cognitive development, and experience on the child's concept of death. Aspects of Piaget's theory of cognitive development provided a meaningful approach to interpreting the results of the study. While effects of religious and cultural beliefs on children's understanding of death is not known, their potential influence on the respondents' understanding of death should not be discounted.

Limitations of the Study

The interpretation and discussion of the present findings require recognition of the potential effect of some extraneous variables or methodological procedures which could have contributed to the outcome of this study. First, the study involved children of Mennonite background. Information on the possible effect of these cultural and religious influences on the children's responses is not available. In the presentation of the interview questions as well as in the scoring procedure, their religious beliefs were taken into consideration and adjustments were made when necessary. Since these same influences are not likely to be present in children of the larger population, this study is limited in its generalizability. The likelihood of obtaining

similar results with other groups of children is not known.

The type of sampling technique employed in this study further restricted its applicability. Due to the ethical considerations required to perform research with children, it was necessary to acquire parental consent prior to conducting the study. This requirement precluded the possibility of obtaining a random sample of children, as only those children whose parents approved their involvement could be included. Consequently, certain non-random characteristics were introduced into the sample. For example, children who participated may have come from homes in which a more open attitude toward discussing death prevailed or in which the contribution offered by research activities were more highly valued. The effects of these sources of bias on the respondents' answers are not known.

Along with a consent form, a cover letter explaining the study was sent to the parents of the children. Some children revealed prior knowledge of the topic and one child had rehearsed with her mother how she might answer the questions. Thus, some children might have had the opportunity to reflect on their ideas about death prior to the interview whereas those children who were unfamiliar with the topic did not have such an opportunity. The effect of these subtle differences on the respondents' answers are impossible to determine.

One of the drawbacks of this study was a function of the selected methodology. As Kurlychek (1978) pointed out,

the main difficulties of the interview method are problems related to standardization and interpretation of the data. Through the use of an interview schedule in which questions followed a predetermined order and were asked of all children, some of the basic difficulties in standardization were diminished. Efforts to decrease problems concerning the scoring and interpretation of the data included obtaining information on percentage of agreement in scoring between two judges.

Inherent in the interview method is the underlying assumption that children are capable of verbalizing their ideas on death. Since children have varying abilities to express themselves, their verbal expression may or may not reflect their true thinking on a question. As Dumont and Foss (1972) suggested, this concern appears especially relevant in the study of taboo subjects, such as death, in which the asking may be regarded as an invasion of privacy. Thus, in the present study, the content of the child's expressions, rather than the manner of expression, was considered in scoring the responses.

Since not all children can read equally well, especially at younger ages, the interview technique has been found to be very useful in research with children (Kerlinger, 1973; Kurlychek, 1978). Thus, it is a valuable tool for acquiring information in an area that cannot otherwise be investigated easily. Based on these considerations, the interview method was selected for the

present study, despite some of its apparent limitations.

CHAPTER V

Implications and Conclusions

The present study contributed to current knowledge concerning children's cognizance of death by examining the influence of the variables of age, cognitive development, and experience. The concept of death for children younger than age 7 was significantly less well-developed than that of older children. Age was not found to be significantly related to older children's understanding. Cognitive development was an important consideration only for those children at the preoperational level of thinking. Using Piaget's theoretical framework, it comprised those children who utilized fantasy or magical reasoning as opposed to concrete, logical reasoning characteristic of the later, more developed stages of the concrete operational period. While experience was not found to be influential for any of the various age-groups, it was found to have a significant effect for children at the preoperational period of development. This suggested that the level of understanding of death for preoperational children was dependent on the child's experience, with experienced children having a more advanced concept of death.

Findings to the research questions yielded an indication of the typical responses of these children. This information would be helpful to future investigators who may wish to pose the same or similar types of questions to their subjects.

The rationale for conducting this type of study was addressed previously. Briefly, it was pointed out that lack of discussion on the topic of death could have adverse effects on the child's development, and further, it was postulated that an adequate understanding of this concept was essential to the emotional well-being of children. Since the "why" of this study is apparent, it is now important to address the question of how to discuss death with children. This is presented in the form of guidelines for parents and other adults. These guidelines have been derived on the basis of children's responses/misconceptions revealed in the present study, the researcher's observations during the course of the study, and additionally, they were gleaned from the available literature which offered prescriptive advice for responding to this question.

A. Guidelines for Discussing Death with Children

1.

Answer children's questions in relation to their level of understanding.

Information which the child cannot understand may lead to misconceptions, fears, or anxieties. In this study, one child expressed that taking an insufficient number of vitamins could result in death. She stated (age 8-11), "Cause if you're supposed to take three a day and if you only take one, then you could die. Cause your body needs minerals and if your body doesn't get

those minerals, then you'll die." One can readily imagine the potential stress which could be induced in this child if she missed taking her vitamins and had not discussed her erroneous ideas with an adult. This explanation was cited amongst realistic causes of death. Thus, while some aspects of thinking are realistic, other areas evidence misconceptions which require clarification for the child.

2. Keep explanations simple and use concrete terms that the child can understand.

   Too much information can be confusing for the child so explanations should be based on children's comments, questions, or previous experiences. Throughout the study, children replied to the interview by retrieving bits of information from their experiences to answer the questions.

3. Avoid the use of expressions such as "Drop dead" or "You'll be the death of me" in the event that death follows, and the child either blames himself/herself or someone else for its occurrence.

4. Avoid the usage of euphemisms such as she is "gone on a long journey" or he is "asleep forever" to describe death. The former may lead the child to believe that the mother deliberately left the child because the child had misbehaved on occasion, while the latter may lead to a morbid dread of going to sleep for fear he/she will never wake up.

5. Religious explanations could be used to account for an afterlife if the parents possess this point of view.

The vast number of these children expressed such a belief. However, it can contribute to some confusion in the child's mind regarding the exact nature of death; on earth the dead are insensate, immobile, and dysfunctional while in heaven these powers are restored. Also, the belief that the soul ascends to heaven caused some confusion, since children, like most adults who ponder this question, are uncertain as to the timing of this occurrence.

The use of religious descriptions to explain the cause of death is not advocated. When children were asked about the causes of death, eight children made a comment such as, "Cause God needs (or wants) more people to be in heaven." While parents might be pleased that children have adopted their views, this type of explanation may lead to anger at God for taking a loved one away. It has been suggested that such thinking is a sure way of creating atheists in later life.

6. Requesting the child to repeat back to the parent or other adult any death-related concepts provides an immediate opportunity to clear up any misunderstandings. (Koocher, 1973).

7. "What is said is important, but <u>how</u> it is said has even greater bearing on whether the child will develop anxiety and fears or accept, within his capacity, the

fact of death." (Grollman, 1967, p. 6).

Children learn values, attitudes, beliefs, and behaviours from their parents and from others in the larger culture. If, on the basis of his/her interactions in the world, the child perceives that questions related to death are not welcome, the child quickly learns not to ask questions. This hinders the development of the child's view of death as a natural process common to all living things and perhaps, contributes to his/her fear of it. Several children revealed the taboo nature of death when they suggested that it should not be discussed in school since it was not polite to speak of it.

8. Encourage the child to ask questions and remember that through each question, the child is adding to his/her developing concept of death.

The important aspect is to maintain an openness in discussing the subject; thus, through a gradual process of coming to understand death, he/she will be better prepared when life's circumstances force the child to deal with it as a personal event.

Those educators who teach death-related issues have generally agreed that the first time a child hears about death should not be surrounding the death of an important person in the child's life. Children in this study provided many instances when death could be discussed: the death of a pet, the death of a character

in a book, the death of television personalities, the occurrence of death in Sunday school stories, and the death of the man down the street. The wise parent or teacher will take advantage of these "teachable moments" to encourage children's comments or queries and thereby contribute to a better understanding of death.

9. Above all, it is important that parents not be afraid to reveal their feelings to their children following the death of a significant other. The expression of feelings are necessary to the healing process; this helps to dissipate the pain engendered by the death.

Only one child in this study indicated that feelings had been discussed following the death of his grandmother. Thus, while children may be denied knowledge of the facts of death, exposure to the expression or to the discussion of feelings is even less common. Mistakenly, expressions of feelings are often interpreted as a human weakness, rather than being viewed as a unique indication of one's humanity.

The implications of the present findings shall be addressed from three perspectives: (1) Implications for death education (2) Implications for research with children (3) Implications for further research.

B. Implications for Death Education

The term "death education" has come to suggest a variety of meanings. (Wass, H., Corr, C.A., Pacholski, R. A., & Sanders, C.M., 1980). This term can be defined as a

formal, instructional unit directed at a designated group of individuals with specific goals and objectives. A broader definition would imply an informal method of teaching an individual/individuals about various death-related concepts and would include "incidental, spontaneous, periodic, occasional, and indirect teaching." (Wass et al., 1980, p.4). The following recommendations are made with reference to the broader definition of death education:

1. Overall, parents require greater education regarding the potential benefits of discussing the subject of death with children. Greater public awareness could be achieved through parent education programs or workshops which particularly address this question. Ideally, such a group would serve as an information source, offer teaching suggestions, and function as a support group. A corollary to this recommendation is more death education workshops for educators.
2. Children's responses often revealed that the topic of death was discussed most frequently surrounding the occurence of death. Other events, such as the death of a pet, occasioned some comments but not with regularity. It is recommended that parents take a more active role in educating their children about death-related events, ideas, and issues. Circumstances in the family home provide many ideal moments for this teaching. As suggested by Wass, " The normal course of everyday events usually provides such opportunities; our task is

to exploit their constructive potential" (1984, p. 292).

3. As part of the relatively recent advent of thanatological literature, there has been an accompanying increase in children's reading material which focus on the subject of death. These books are an invaluable asset in teaching the child about the various facets of death. In the present study, only two children recalled reading a book which specifically dealt with the topic of death. The use of these is recommended.
4. For the most part, children's reading programs reflect a paucity of death-related stories, if they occur at all. The occasional presentation of this topic in the reading curriculum would provide more opportunities to discuss this important life concern.
5. Teachers should be encouraged to re-consider their role as it relates to death education. For example, only 26% of these children recalled that a teacher had ever mentioned the occurrence of a death. Carson (cited in Wass, 1984) has emphasized the importance of the teacher's role: "The teacher should, after the parent, be the second most important pedagogue in a child's life. Education involves the transmission of facts but, more importantly, the formation of children's attitudes" (p. 317).

While the cognitive understanding of death deserves attention, its affective dimension often hinders the accomplishment of this goal. It is the affective element

of death which often prohibits parents, educators, or others from discussing this concept with children since adults fear not only their heightened sensitivity to the topic, but consider that it may provoke fear in the child. Yet, if one is to aid the child in his/her development, then the adult will need to reveal a willingness to discuss the subject of death with children so as to prepare the child for a time of crisis. If adults demonstrated an acceptance of death as part of the natural order of things, is it not more likely that children, too, will begin to think of death in this manner, rather than as something to be feared and avoided?

C. Implications for Research with Children

An observation of the reactions and comments of the participants indicated that the topic of death can be discussed with children. This conclusion is consistent with those of other researchers. Swain (1979) observed: "Despite the fact that parents and professionals may be quite hesitant to discuss the subject of death with children, it appears that death is a topic that can readily be discussed with children" (p. 357).

Throughout the study, children responded to the interview by stating their views in a factual and straight forward manner. No child asked to stop the interview, nor was this necessary since adverse effects were not observed.

Following completion of the interview, children were given the opportunity to express any questions or concerns which might have arisen. While only a small number had anything further to add, their comments were enlightening. Several took the opportunity to ask their own questions about death or queried the researcher concerning the nature of her experiences with it. One child asked about an afterlife and later commented that the interview had been beneficial to her as, "It helped me not to be so scared anymore. (Query - Why do you think you were scared of it?) I don't know. I just thought that when I'd go to sleep, I would die." The child considered this possible since she had read an account in the newspaper of a little boy who had died in his sleep. Thus, perhaps the children also benefited from the interview as it offered them the opportunity to clarify their ideas on the nature of death.

Due to the sensitive nature of this topic, a caveat is in order. In conducting research of this type, the investigator must be aware that emotional reactions may arise and must assume responsibility for them, if they do occur. This would include responding appropriately to the emotions of the child, making arrangements for necessary referrals, and follow-up. Counsellors and psychologists interested in death-related issues would be well-suited to research of this kind.

D. Implications for Future Research

The children in the present study ranged in age from 5-7 to 10-11; thus, the applicability of these results is restricted to these age groups. While it is likely that children younger than age 5 would demonstrate less well-developed concepts than older children, the present findings were not able to substantiate this supposition. An extension of the present study to include both younger and older children would offer a broader perspective for understanding the development of this concept in childhood.

The present findings indicated that experienced and inexperienced children did not differ in their overall concept of death when the analysis included children of various age levels . While Kane(1975) found significant differences between these two groups for children aged 3 to 6, her findings have not been replicated. This suggests that future systematic study of the influence of experience is required for younger age levels.

More studies which include greater numbers of experienced and inexperienced children at each age level would be beneficial. In previous studies, it has usually been necessary to collapse the age groups in order to obtain adequate numbers of both inexperienced or experienced children. The effects of experience/inexperience at each age level are not known. Knowledge of the precise age at which prior experience has a significant effect on the child's concept of death would be helpful to parents and educators;

this finding would suggest the approximate age at which the child would benefit from discussions or other exposure to death.

Cognitive development was found to be an influential factor on the child's concept of death only at the preoperational level. It is possible that different results might have been obtained if the children's explanations for their predictions on the Piagetian tasks had been used in the scoring procedure. The general availability of standard Piagetian conservation kits and standard scoring criteria would add considerably to the ease of this task. Additionally, it would permit greater confidence in comparison of the present results to those found in other studies.

The influence of cognitive ability in relation to the child's understanding of death could also be examined through the use of standardized intelligence tests. Certainly, this would introduce more standardization into the procedure. Peck (cited in Kane, 1975) found a significant relationship between mental age and concept attainment but an even stronger correlation for chronological age. Overall, studies which have examined cognitive development in relation to the child's concept of death are inconclusive and few in number.

The utilization of a matched groups design in this study was desirable. Ideally, this would have included matching for the factors of age, experience, cognitive

development, and cultural groups. Given the present resistance to research of this type, adequate numbers of volunteers for this type of design are difficult to obtain. In the event that the preceding recommendations for death education are realized, a matched groups design might be more readily attainable in future studies.

Replication studies are required to obtain reliability and validity data for the interview schedule used in this study. Although the questions which were designed to elicit responses for each component appear to have face validity, it may be that a slight change in wording or another question would have been more appropriate. Also, questions which examined the components of dysfunctionality and insensitivity were awkward; 0 other approaches to investigating these aspects are necessary.

The scoring procedure should be replicated in future studies. The percentage of agreement ratios for some of the components were rather low and re-examination or re-structuring of the scoring criteria may eliminate some of the observed inconsistencies.

Finally, some of the trends in the results of the research questions suggested other areas of investigation. Children's definitions of death were found to vary as a function of age level as did children's explanations for a lack of functioning after death. Further inquiry into each of these questions may yield additional information which will contribute to present understanding of the development

of this concept throughout childhood.

E. Concluding Remarks

This study demonstrated that children do have an understanding of the various components of death. Furthermore, it is a subject which can be investigated with them. Hopefully through the reading of this thesis, parents/educators will become more aware of the importance of more open discussion on this topic with children.

APPENDIX A

Consent Form

Date:

I hereby give consent for my child to participate in Ms. Hildebrand's research and hereby give permission for his/her responses to be tape-recorded.

I would prefer to have the interview occur:

at home_____

at school_____

I consent to my child receiving a small gift in appreciation for his/her involvement.

Yes_____

No_____

I would like to receive a brief copy of research findings.

Yes_____

No_____

Signature:_____

Address:_____

Postal Code:_____

Telephone Number:_____

Child's date of birth:_____

Letter to Parents

Dear Parent:

I am a graduate student in educational psychology at the University of Alberta who is interested in studying how children think about death and how they have come to have these ideas. To accomplish this goal, I submitted a research request to the Rhineland School Division who kindly gave their permission for this research to be conducted in their schools.

I would like to ask your child some simple questions related to their understanding of death and ask them to perform several elementary scientific tasks. To complete the entire procedure would require approximately 30 minutes of your child's time. Your child's responses would be taped and following analysis, these tapes would be erased.

Participation is voluntary and your child is free to discontinue the interview at any time. Your child can be interviewed at school or at home, if you would prefer. If at home, we could discuss the results together if you so wished.

The purpose of this kind of research is to assist parents and teachers in having a better understanding of how children think about death and to suggest ways for adults to answer children's questions on it. The findings from this research will be made available to your school following completion of this study.

Should you have any questions prior to signing the enclosed consent form or following the study, you are invited to contact Ms. Hildebrand at...

You assistance will be gratefully appreciated.

Sincerely,

Ms. Katherine Hildebrand

APPENDIX B

Concept of Death

Prior to posing the questions regarding their conceptualization of death, the children will be asked to provide meanings for three other words: party, book, and toy. The following questions will then be presented to the children in the order that they are listed.

Instructions: "I'm going to ask you some questions and I'll record your answers with the tape recorder. There are no right or wrong answers for any of these questions. I just want to know what boys and girls of your age think about these questions."

1. Can you tell me everything you know about death? (What does death mean?)
2. What kinds of things can a dead person do...play, see, walk?
3. Where are they? (dead people)
4. Can you make dead things or people come back to life?
5. What makes people die? (Why do people die?) (What causes death?)
6. Do things work in people's bodies after they die? (Do they eat, drink, breathe, think, feel?)
7. Who dies? (Does everybody die or only some of the people?) (Will you die? When will you die?)
8. Can a dead person:

smell flowers

taste food

catch balls

answer questions

can they dream or think

jump when they are tickled

9. How do you know when someone is dead? (What do they look like?)

10. Do you think that there is life after death? (Do you think that we live on after we die? If so, where?)

Note: Bracketed questions denote alternatives that may be used when the child does not understand the initial question.

Experiences of Death

Do you have a pet?

Have you ever had a pet that died?

How did you feel when your pet died?

Do you remember what your parents said to you when your pet died?

When was the first time you heard about death?

Do you watch movies or TV much? What's your favourite program?

Have you seen people die on TV or in the movies? In which shows did you see this happen?

How do you feel when you see people die on TV?

Do you remember hearing or reading any stories that made you think of death? (If yes, what was this story?)

Do you go to Sunday School or church? (If yes, have you ever talked about death in Sunday School or church?)

In school, teachers and students talk about many things. What is your favourite thing to talk about in school?

Has you teacher ever talked about death to your classroom? (If yes, what did your teacher talk about? When was that time?)

Has any student from your school ever died?

How many people are there in your family?

Has anyone in your family ever died?

How did you feel when you learned that they died?

Have you ever talked with your parents about death or about

someone that has died? (If yes, what did you talk about?)

Do you talk to your friends about death? (If yes, what do you talk about?)

Do you know anyone else that has died? (If yes, who were they? How many others?)

How did you feel when you learned that they had died?

Do you know what a funeral is?

Have you ever gone to a funeral? (If yes, whose funeral was it? How many? How old were you when you went?)

Have you ever seen someone that is dead?

I would like to learn how boys and girls know what death means. How did you learn about death?

Do you think students and teachers should talk about death in school?

Can you tell me why you answered yes or no?

Is there anything else that you are thinking about that you would like to tell me or ask me about death?

APPENDIX C

Instructions for Piagetian Tasks

F. Conservation of Amount

1.

"See these two red play-dough balls. They are just the same amount. Do you agree that they are the same amount?" (If child says one is larger or smaller than the other one allow the child to make the necessary changes until the child considers that both are the same size).

"Now watch what I do." (Experimenter changes the shape of one of the balls to resemble a sausage).

"Are they the same amount now, or does one have more or less than the other one?"

"Why did you answer that the sausage is now...?" (Whatever the child answered).

G. Conservation of Weight

2.

"We have the same two red balls. They are the same amount and weight, that is, they weigh the same. Do you agree that they have the same amount and they weigh the same?" (If the child says one weighs more than the other, allow the child to make the necessary changes

until he/she thinks they weigh the same).

"Now watch what I do." (Experimenter changes the shape of one of the balls to resemble a sausage).

"Are they the same weight now, or does one of them weigh less or more than the other one?"

"Why did you answer that the sausage is now..."(Whatever the child answered).

H. Conservation of Volume

3.

"See these two red balls. They are just alike. They are the same amount and they weigh the same. Do you think that they're the same amount and they weigh the same?" (Again, if the child says one is larger or smaller than the other one, allow the child to make the necessary changes until they are the same size and he/she thinks they weigh the same).

"See these two jars. They are filled with water and they both have the same amount of water in them. Do you think that they both have the same amount of water in them?" (If the child says one contains more water than the other, permit the child to make the necessary changes until the child considers that the water levels are equal).

"What will happen if I put each of these two balls into a jar of water?" (Following the child's response, the experimenter puts each ball into a jar of water. After

child has observed the water level raise equally, the experimenter removes the two balls.)

"Watch what I do." (Experimenter changes the shape of one of the balls into a sausage).

"I will put each of these into a jar of water. Will the water be the same in each jar now, or will the water be higher or lower in one of the jars?"

"Tell me why you think that..." (Whatever the child answered).

APPENDIX D

Definitions of a Funeral

"Well, you sing and some people read in the Bible and I don't know what else." (age 5-9)

"It's something that I think that you... say 'Hi' or 'Bye' to a person if they are dead or something." (age 5-9)

"Yes, when people die they have a funeral and bury him. They tell you things about him." (age 6-11)

"It's when they bring the person that died and they bring it to a place where they're going to have a church or something...they invite his friends, and then they talk about how he died and say nice things about the person." (age 7-7)

"It's when someone dies and then people usually put them in some kind of box thing and then some blankets on them. And some people they put flowers on them and then you go around and you, you look at...them. And sometimes people cry. And my mom, she brought along handkerchiefs when she went there so to wipe her tears when she cried." (age 7-9)

"You go and see the person that has died and he's all fixed up and stuff like that. They've all fixed him up, like make-up was put on his face and made him look good." (age 8-2)

"It's sad, that's for sure." (age 9-9)

"A funeral is where somebody gets buried after they're dead and they stay there for quite a long time. And then they disintegrate and they go up." (age 10-2)

"Minister...says a bunch of good things about the person, and that he'll be with God, or he'll be in heaven and when he dies, so none of us should worry. It just gives you usually some comfort. And it worries me when we see them and we all get to walk past them (the person in the casket). (age 10-4)

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